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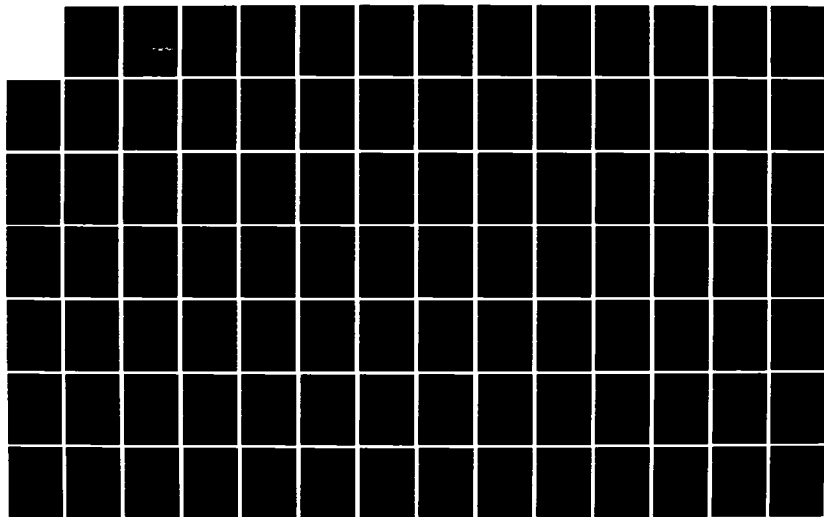
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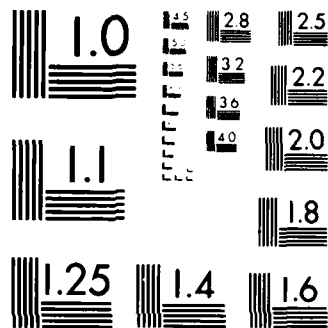
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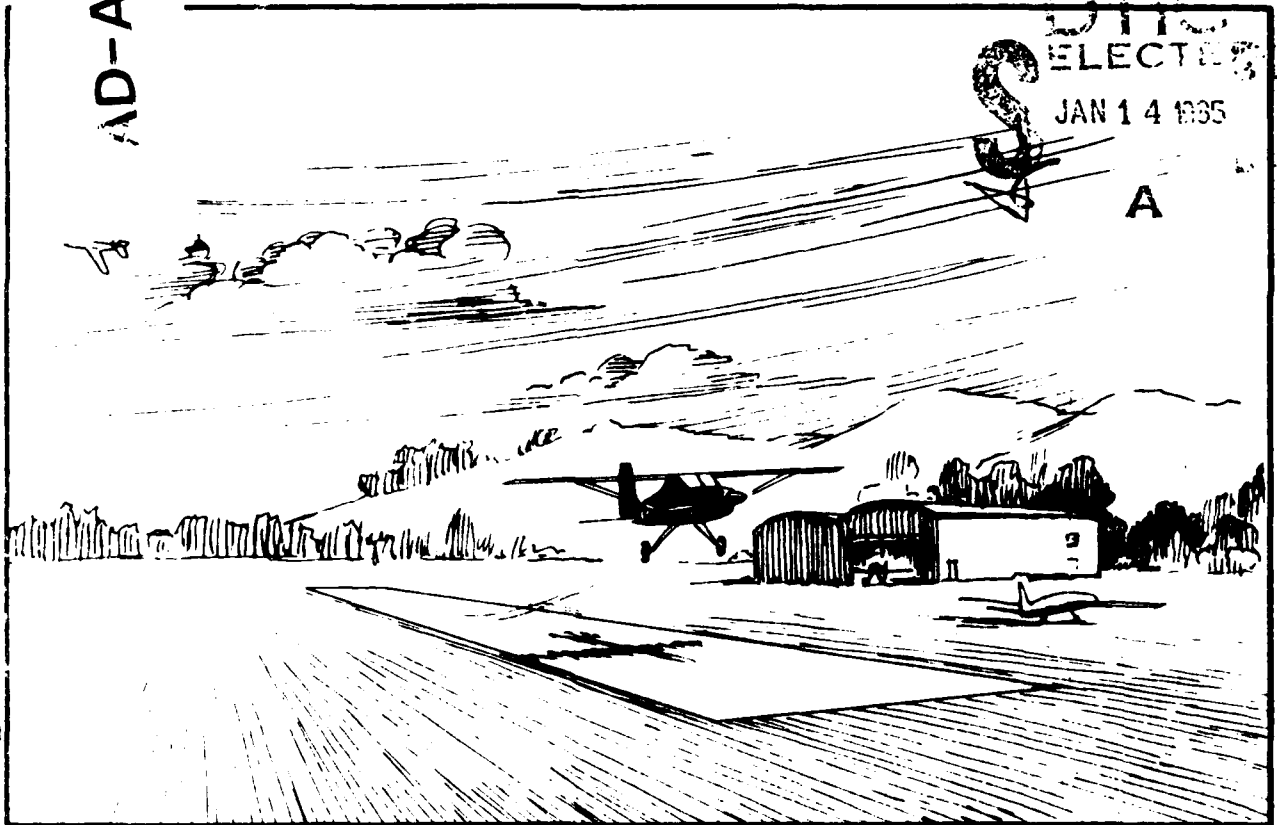


U.S. Department
of Transportation
Federal Aviation
Administration

General Aviation Activity and Avionics Survey

Annual Summary Report 1983 Data

AD-A149 572



October 1984

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Office of Management Systems
Information and Statistics Division

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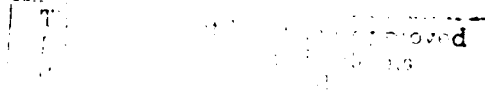
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16. Abstract <p>This report presents the results and a description of the 1983 General Aviation Activity and Avionics Survey. The survey was conducted during 1984 by the FAA to obtain information on the activity and avionics of the United States registered general aviation aircraft fleet, the dominant component of civil aviation in the U.S. The survey was based on a statistically selected sample of about 10.7 percent of the general aviation fleet and obtained a response rate of 62 percent. Survey results are based upon responses but are expanded upward to represent the total population.</p> <p>Survey results revealed that during 1983 an estimated 35.2 million hours of flying time were logged by the 213,293 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 164 hours. The active aircraft represented about 82 percent of the registered general aviation fleet. The report contains breakdowns of these and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Also included are fuel consumption, lifetime airframe hours, avionics, and engine hours estimates. In addition, tables are included for detailed analysis of the avionics capabilities of the GA fleet. Estimates of general aviation miles flown in 1983 have been included for the first time, in this report, broken down by aircraft type.</p>					
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PREFACE

This report presents the results of the 1983 General Aviation Activity and Avionics Survey. The survey is the continuation of an FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Information and Statistics Division sponsored and coordinated the activities associated with the survey. The Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, developed the sample design and computer system for sample selection, data editing and estimation of results, ran the system during survey production, analyzed survey results, and prepared the survey report. TSC transferred the survey responses to machine readable forms and was also responsible for printing names, addresses, and aircraft information on the survey questionnaires.

The authors would like to acknowledge contributions to this report by: Nicholas Soldo and Patricia Carter, AMS-420, who guided the project and reviewed the report text; Marilyn Marotta of Systems Development Corporation, who revised the computer programs for the 1983 survey and performed the production runs to produce the estimates contained in this report; and John Royal of Systems Development Corporation, and Juan Bellantoni and Russ Nahigian of TSC, who developed the methodology and computer software for estimating general aviation miles flown.

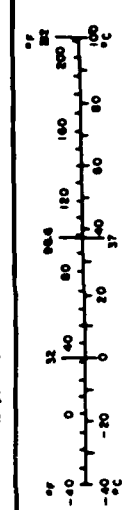
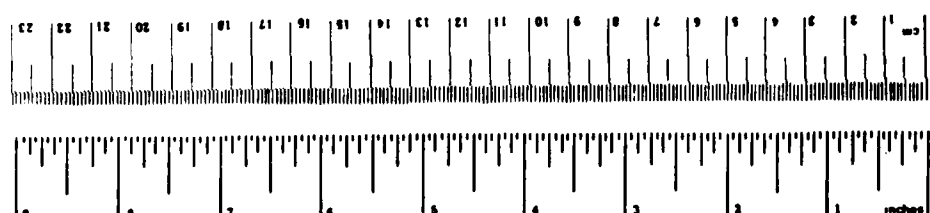
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures				Approximate Conversions from Metric Measures			
Symbol	When You Know	Multiply by	To Find	Symbol	When You Know	Multiply by	To Find
LENGTH				LENGTH			
in	inches	2.5	centimeters	mm	millimeters	0.04	inches
ft	feet	30	centimeters	cm	centimeters	0.4	inches
y	yards	0.9	meters	m	meters	3.3	feet
mi	miles	1.6	kilometers	km	kilometers	0.6	miles
AREA				AREA			
sq in	square inches	6.5	square centimeters	sq cm	square centimeters	0.16	square inches
sq ft	square feet	0.09	square meters	sq m	square meters	1.2	square yards
sq yd	square yards	0.8	square meters	ha	hectares (10,000 m ²)	0.4	square miles
ac	acres	2.5	hectares	mi ²	square miles	2.5	acres
MASS (weight)				MASS (weight)			
oz	ounces	28	grams	g	grams	0.035	ounces
lb	pounds	0.45	kilograms	kg	kilograms	2.2	pounds
sh (200 lb)	short tons	0.9	tonnes	t	tonnes (1,000 kg)	1.1	short tons
VOLUME				VOLUME			
teaspoon	teaspoons	5	milliliters	ml	milliliters	0.03	fluid ounces
tablespoon	tablespoons	15	milliliters	fl oz	fluid ounces	2.1	tablespoons
cup	cups	30	milliliters	l	liters	1.06	quarts
cup	cup	0.24	liters	l	liters	0.26	gallons
quart	quarts	0.95	liters	m ³	cubic meters	36	cubic feet
gallon	gallons	3.8	liters	m ³	cubic meters	1.3	cubic yards
cu ft	cubic feet	0.03	cubic meters	TEMPERATURE (exact)			
cu yd	cubic yards	0.76	cubic meters	°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature
TEMPERATURE (exact)				TEMPERATURE (exact)			
F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature



EXECUTIVE SUMMARY

This report presents the results of the seventh General Aviation Activity and Avionics Survey, conducted in 1984 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1983 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 10.7 percent of the registered general aviation fleet to participate in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, yielding in total a response rate of 62 percent.

Some important survey findings appear below:

- o An estimated 35.2 million hours of flying time were logged by the 213,293 active general aviation aircraft in the U.S. fleet during 1983. There was a 1.7 percent increase in the number of active aircraft from 1982 to 1983. The active aircraft had a mean flight time per aircraft of 164 hours and represented about 82 percent of the registered general aviation fleet.
- o Turboprop and turbojet aircraft averaged a greater number of flight hours per aircraft than other aircraft types with 389 hours and 382 hours, respectively. Twin engine turboprops with thirteen or more seats flew almost 1139 hours per aircraft. In contrast, single engine piston powered aircraft with fewer than four seats averaged approximately 140 hours.
- o The most common primary use of general aviation aircraft was personal for an estimated 48 percent of the active fleet, followed by business for 21 percent of the fleet, and executive for 8 percent of the fleet.
- o The most populous region in terms of based aircraft was the Great Lakes Region, which housed an estimated 18 percent of all registered general aviation aircraft, followed closely by the Western-Pacific Region with 17 percent. The most populous state was California, which housed 13 percent of the registered aircraft.
- o About 84 percent of the general aviation aircraft had two-way VHF communication equipment, about 64 percent were equipped with 4096-code transponders, about 56 percent had at least one component of an instrument landing system, and about 79 percent had some form of navigation equipment.
- o An estimated 25.8 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 67.0 percent of the GA fleet could not fly above 12,500 feet due to avionics limitations alone.

- o An estimated 40.5 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1983.
- o About 76 percent of the total hours logged by the 1983 general aviation fleet were flown in visual meteorological (VM) conditions during the day. Aircraft flown in VM night, instrument meteorological (IM) day, and IM night conditions accounted for 10 percent, 10 percent, and 4 percent of the total hours flown, respectively.
- o The general aviation aircraft fleet consumed an estimated 1,041 million gallons of fuel during 1983, 428 million gallons of aviation gasoline and 613 million gallons of jet fuel.
- o The general aviation aircraft fleet flew an estimated 4,261 billion air miles during 1983.

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1. INTRODUCTION

1.1 GENERAL

1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1983 general aviation composed over 98 percent of the U.S. civil air fleet¹, accounted for 81 percent of civil operations at FAA towered airports², and logged 80 percent of the total hours flown by the U.S. civil air fleet³. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S., served two purposes: (1) Part 1 was the mandatory aircraft registration renewal form, (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.3.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1983 statistics in this report were derived from the seventh survey, which took place in 1984. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government.

¹Census of U.S. Civil Aircraft, Calendar Year 1983, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1984), p. 4.

²"FAA Air Traffic Activity, Calendar Year 1983 Report," Federal Aviation Administration, (Washington, DC, 1984).

Note: General aviation as used in this report combines both general aviation and air taxi from the source above.

³Air Carrier: Census of U.S. Civil Aircraft, Calendar Year 1983, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1984), p. 21. General Aviation: Table 2.4

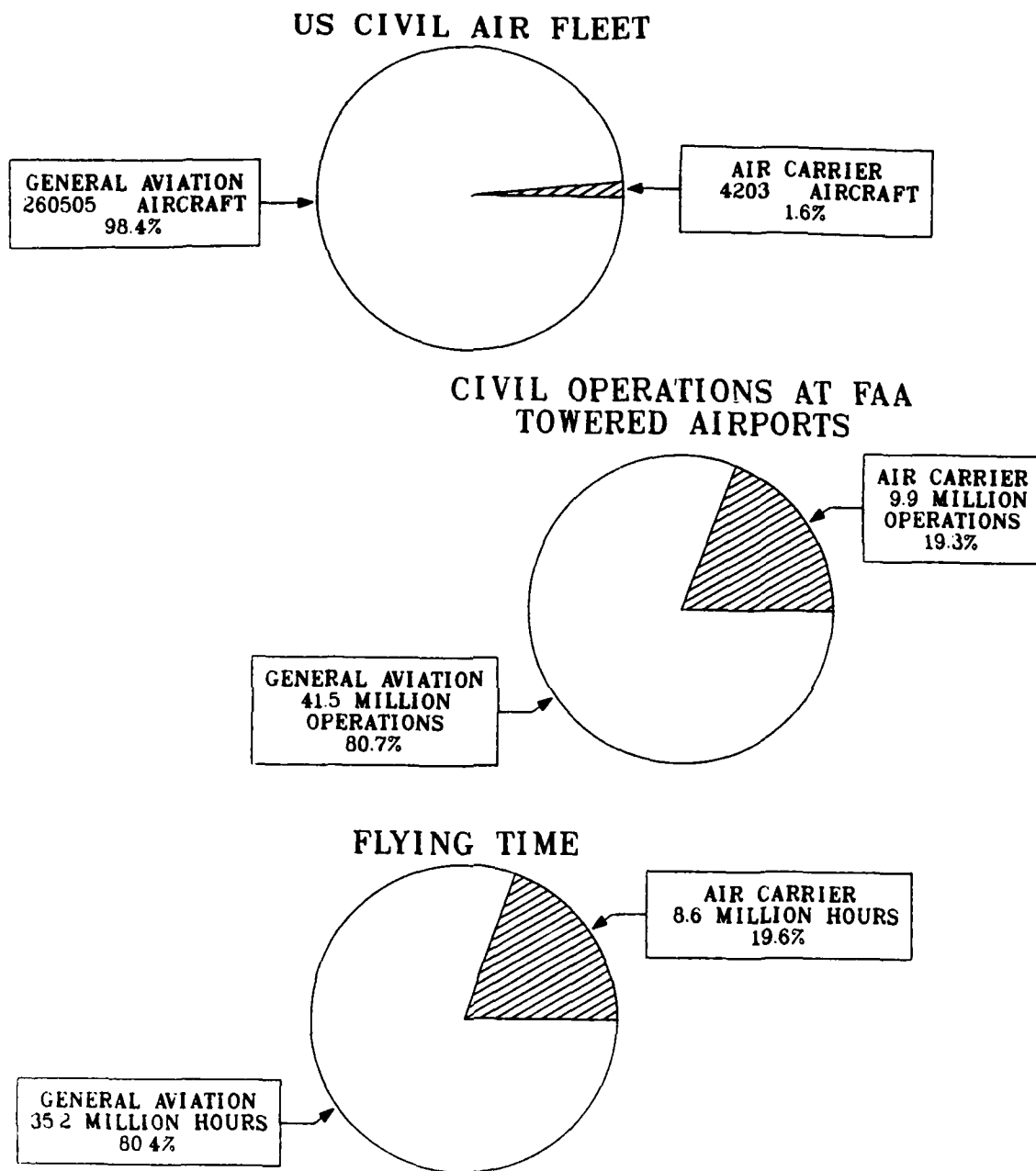


FIGURE 11. A CONTRAST OF GENERAL AVIATION AND AIR CARRIER ACTIVITY IN 1983

1.2 SURVEY COVERAGE

1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations Parts 121 and 127. These two parts cover the operations of fixed wing aircraft and rotorcraft, respectively, that 1) have been issued a certificate of public convenience and necessity by the Civil Aeronautics Board authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations, and 2) are used by large aircraft commercial operators. General aviation thus includes aircraft operated under:

Part 91: General operating and flight rules.

Part 123: Certification and operations: air travel clubs using large airplanes.

Part 133: Rotorcraft external load operations.

Part 135: Air taxi operators and commercial operators of small aircraft.

Part 137: Agricultural aircraft operations.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

1.2.2 Geographic

The sample survey covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1983. Over 99 percent of these aircraft are registered to owners living in the 50 states and Washington, D.C., with about 0.20 percent (534 aircraft) registered in Puerto Rico and other U.S. territories, and 0.13 percent (350 aircraft) registered to owners living in foreign countries¹.

1.2.3 Content

Appendix A.3 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide the following information on the sampled aircraft's characteristics and uses for various periods:

¹Source: FAA Aircraft Registration Master File as of December 31, 1983.

- 1) Hours by use, IFR hours, percentage of hours flown in Instrument Meteorological (IM) and Visual Meteorological (VM) conditions during the day and evening, and fuel consumption for entire calendar year 1983,
- 2) Airframe hour reading and location of aircraft base as of December 31, 1983, and
- 3) Avionics equipment currently on board.

1.3 SURVEY METHOD

The method of collecting data for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in two mailings. The first mailing in February, 1984, covered all 27,828 aircraft in the sample and had a response rate of 54 percent as shown in Table 1-1. This was about 86 percent of the total responses to the survey. The second mailing conducted in April, 1984, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 19 percent which accounted for 14 percent of the total responses to the survey. The combined response rate for the two mailings was 62 percent.

TABLE 1-1. SUMMARY OF RESPONSE INFORMATION BY SURVEY PHASE

SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE (R/(TOTAL R) X 100%)
FIRST MAILING	27,827	14,897	54%	86%
SECOND MAILING	12,930	2,443	19%	14%
TOTAL	27,827	17,340	62%	100%

1.4 SUMMARY OF SURVEY RESULTS

1.4.1 National Scene

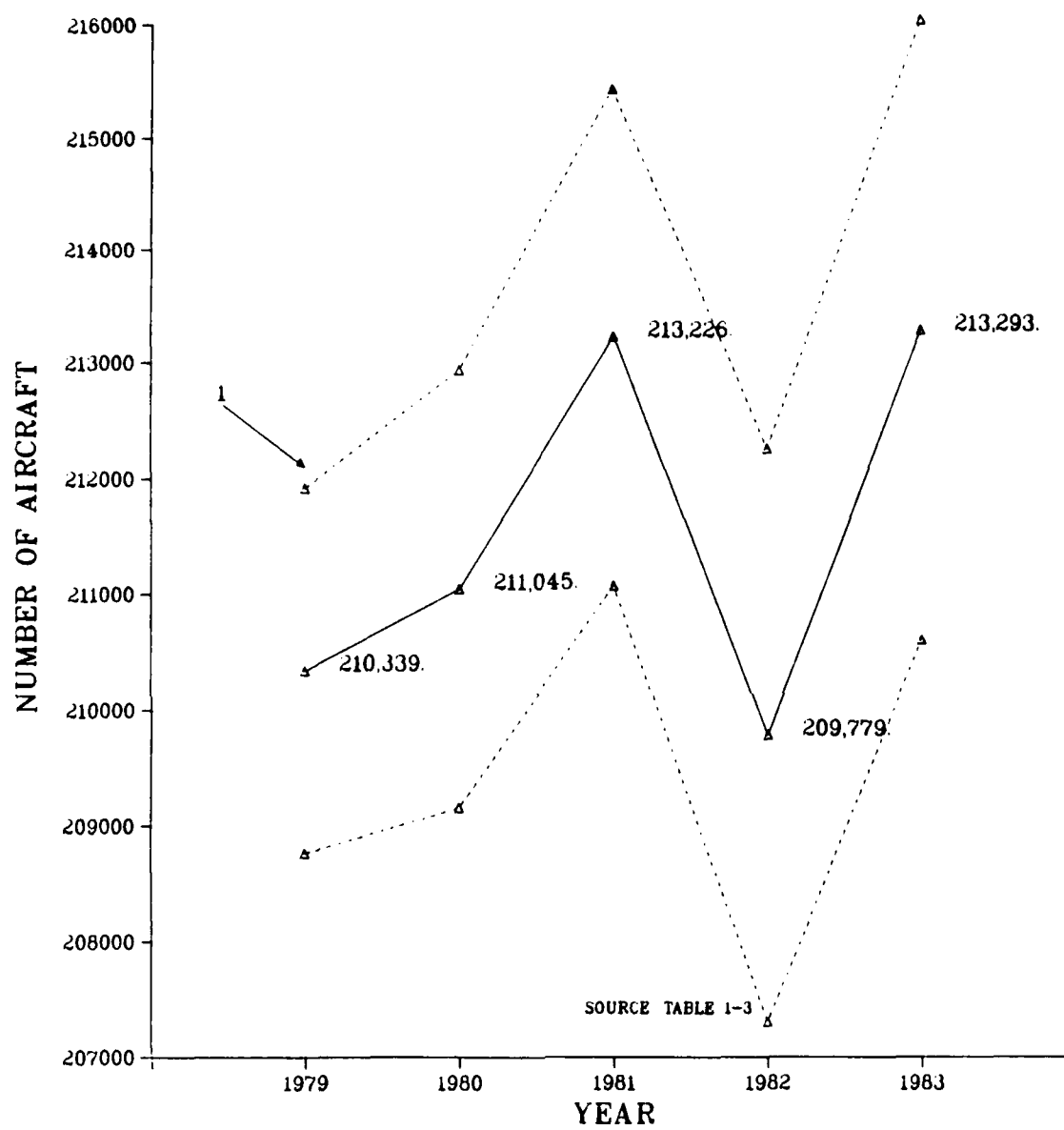
Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1983 an estimated 35.2 million hours of flying time were logged by the 213,293 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 164 hours. These aircraft comprised 82 percent of the registered general aviation fleet. The statistics for 1983 showed a 3.6 percent decrease in flying hours, a 1.0 percent increase in the number of active aircraft in the general aviation fleet, and a 5.7 percent decrease in mean hours per aircraft over the comparable figures for 1982. Longer-term trends for these variables are found in Figures 1.2, 1.3, and 1.4. Although the number of active aircraft has been increasing in general over the years, the other activity measures have shown a steady decrease. Both general aviation total flying time and mean time per aircraft have decreased 19 percent since 1979. The decrease can most likely be attributed to the decline in the economy and rising aircraft operational costs. In addition, the air traffic controller's strike in August, 1981, which caused the FAA to institute certain constraints on the users of the National Airspace System to assure safe and efficient operations, reduced general aviation traffic levels in both 1981 and 1982.

1.4.2 Results by Aircraft Type

The most heavily used aircraft types were fixed wing turboprops with thirteen or more seats, averaging over 1100 hours per aircraft, because of their heavy commercial usage as commuter air carriers and air taxis. There was a great deal of variation in activity among all types of general aviation aircraft in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

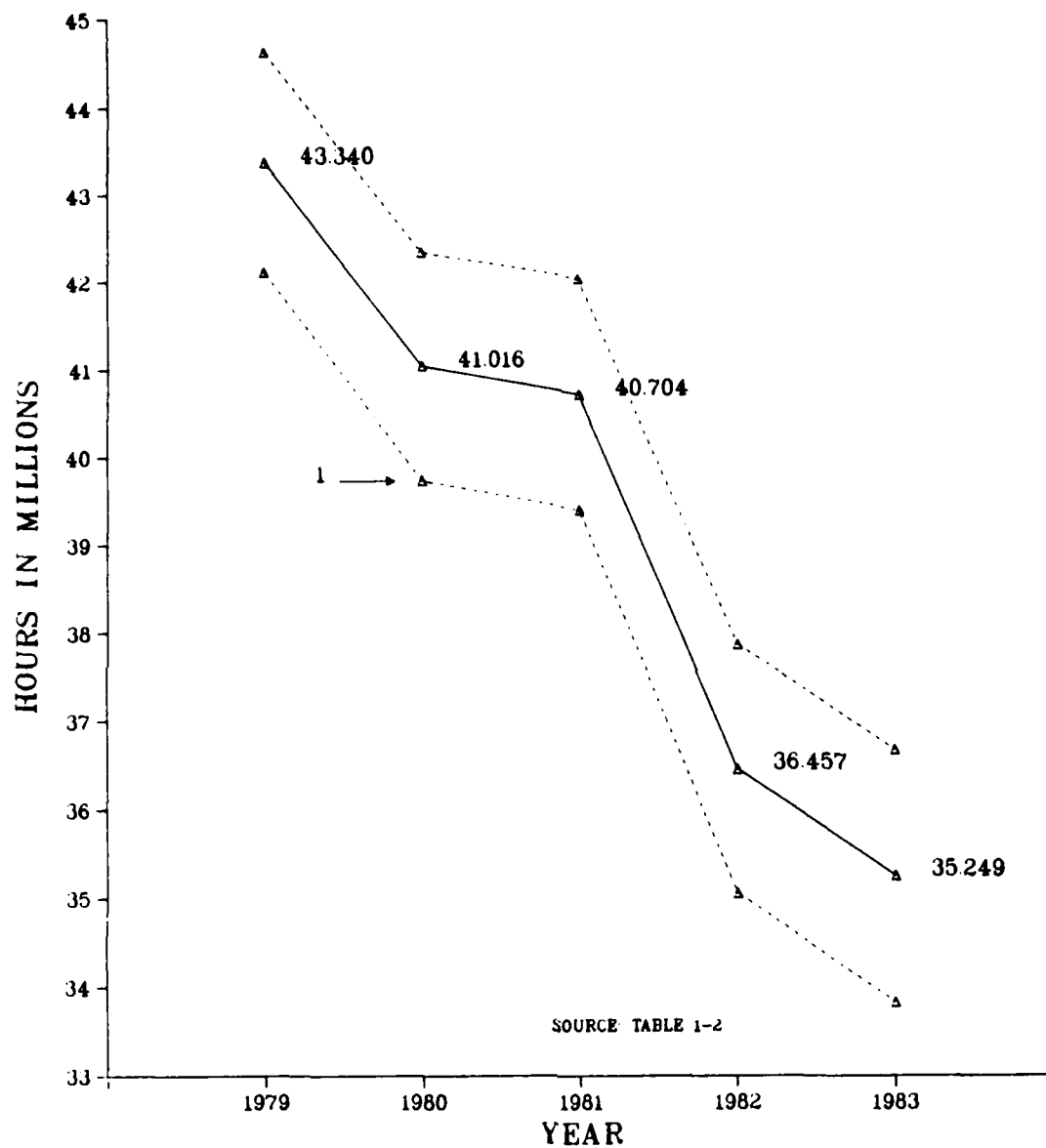
Although owners of ultralights are not required to register their aircraft under current aviation regulations, a number of owners have done so. An item on the questionnaire makes it possible to identify ultralights responding to the survey and to estimate their activity. There are approximately 977 registered aircraft that are ultralights, about 588 of which are active, flying around 117 hours per aircraft for a total flying time of 76,000 hours.

Five-year trends from 1978 to 1983 for total flight time and number of active aircraft are shown by aircraft type in Tables 1-2 and 1-3. Even though the number of active aircraft has registered an annual growth rate of over 1.4 percent, the trend for total flight time is downward at an annual rate of -2.2 percent. Closer examination of the tables reveals that the fixed-wing single engine piston aircraft and small twin engine piston aircraft are largely responsible for the decline in



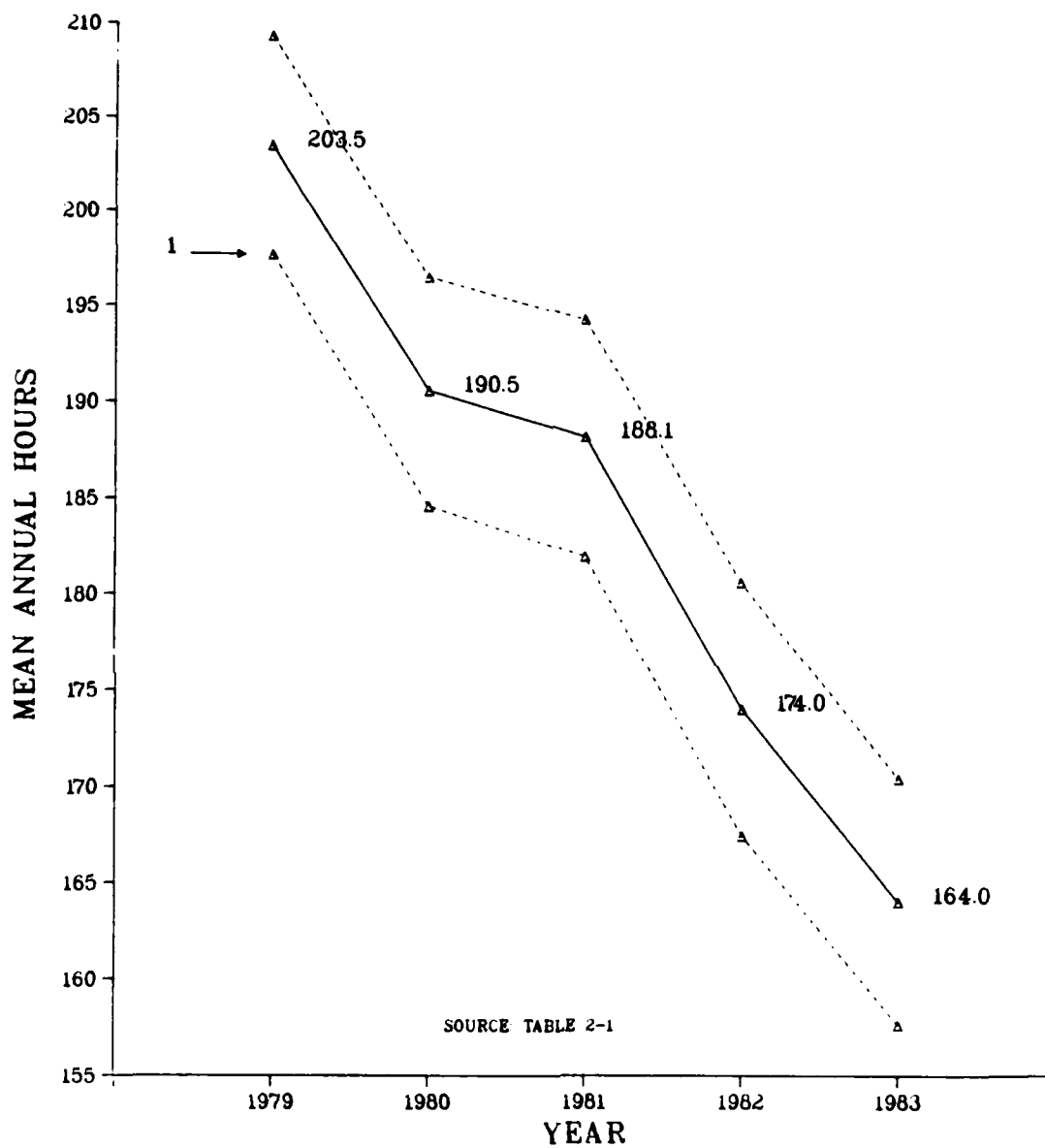
1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE
1979 - 1983 TRUE VALUES. SEE APPENDIX B

FIGURE 1.2. GENERAL AVIATION ACTIVE FLEET SIZE 1979 - 1983



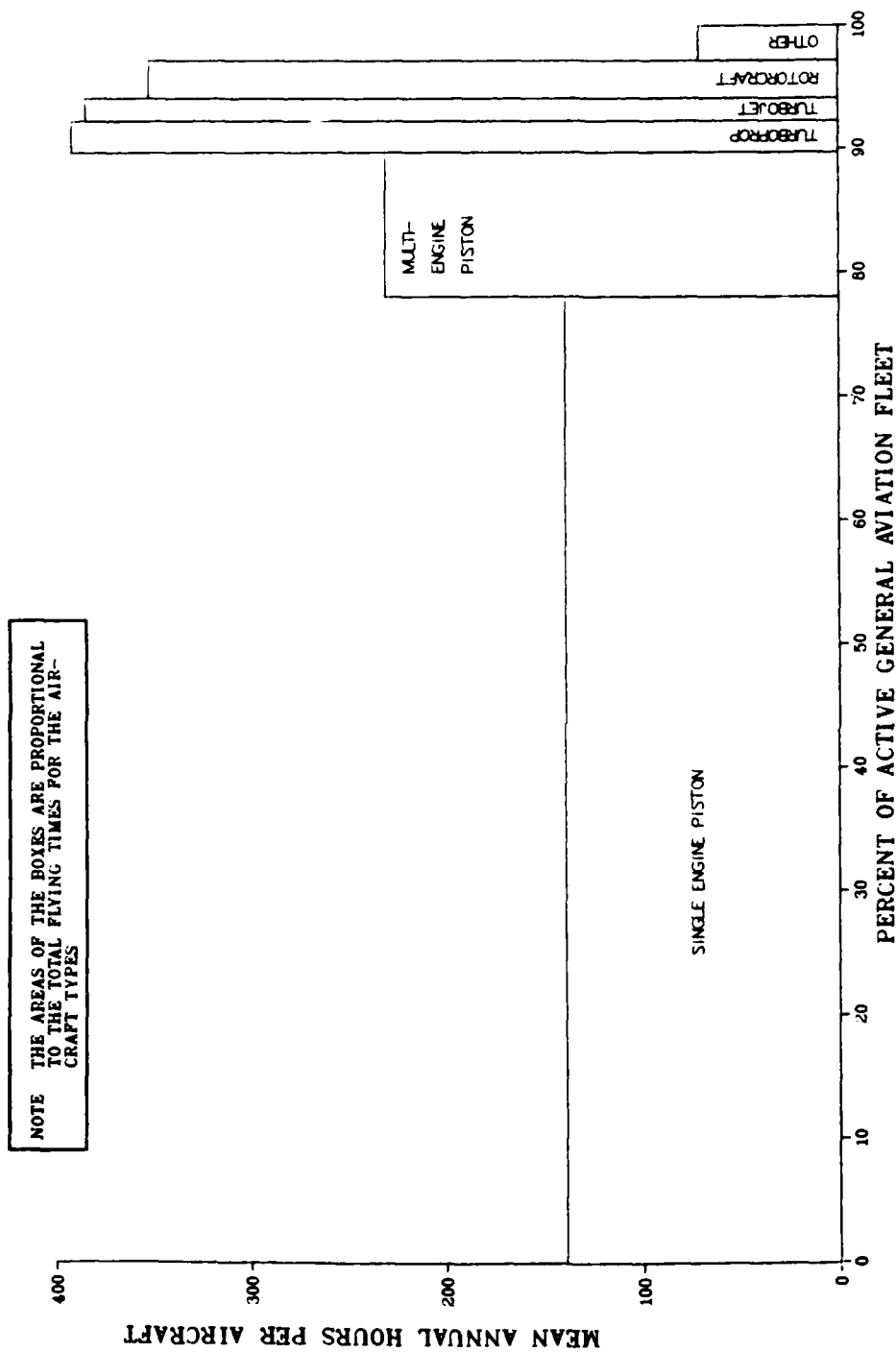
1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1979 - 1983 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.3. GENERAL AVIATION TOTAL FLYING TIME 1979 - 1983



1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1979 - 1983 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT 1979 - 1983



SOURCE TABLE 2-1

FIGURE 1.5. 1983 GENERAL AVIATION ACTIVITY MEASURES
BY AIRCRAFT TYPE

**TABLE 1-2 GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN
BY AIRCRAFT TYPE, 1978 - 1983 (Thousands of Hours)**

<u>AIRCRAFT TYPE</u>	<u>1978</u> (Standard Error)	<u>1979</u> (Standard Error)	<u>1980</u> (Standard Error)	<u>1981</u> (Standard Error)	<u>1982</u> (Standard Error)	<u>1983</u> (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1-3 seats	10,111 (570)	11,180 (384)	10,044 (399)	10,185 (399)	8,325 (374)	8,189 (399)	-4.13
1-engine piston 4+ seats	17,746 (992)	19,109 (420)	18,295 (428)	17,506 (432)	15,934 (472)	14,959 (441)	-3.36
2-engine piston 1-6 seats	3,644 (241)	4,006 (148)	3,730 (172)	3,606 (144)	3,040 (177)	3,013 (192)	-3.73
2-engine piston 7+ seats	2,439 (189)	2,855 (137)	2,547 (143)	2,762 (153)	2,617 (197)	2,717 (235)	2.18
Other piston	104 (7)	152 (15)	130 (18)	24 (63)	33 (10)	32 (10)	-21.00
2-engine turboprop 1-12 seats	960 (49)	1,254 (57)	1,489 (55)	1,549 (68)	1,576 (116)	1,431 (93)	8.31
2-engine turboprop 13+ seats	622 (63)	572 (45)	964 (55)	542 (45)	520 (84)	659 (118)	1.16
Other turboprop	24 (3)	45 (2)	56 (10)	62 (11)	71 (20)	83 (31)	28.17
2-engine turbojet	1,019 (44)	1,125 (39)	1,163 (52)	1,238 (48)	1,347 (98)	1,350 (92)	5.79
Other turbojet	176 (30)	134 (9)	169 (27)	149 (16)	264 (46)	124 (31)	-6.76
ROTORCRAFT							
Piston	806 (79)	892 (97)	736 (75)	930 (108)	579 (58)	572 (49)	-6.63
Turbine	1,421 (135)	1,664 (108)	1,603 (115)	1,754 (150)	1,771 (145)	1,700 (151)	3.65
OTHER	338 (20)	353 (29)	359 (21)	391 (34)	379 (40)	420 (49)	4.44
TOTAL AIRCRAFT	39,409 (1,199)	43,340 (627)	41,016 (650)	40,704 (659)	36,456 (701)	35,249 (712)	-2.21

NOTE: Column summations may differ from printed totals due to estimation procedures.

**TABLE 1-3 GROWTH OF ACTIVE GENERAL AVIATION FLEET
BY AIRCRAFT TYPE, 1978 - 1983 (Number of Aircraft)**

AIRCRAFT TYPE	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	1982 (Standard Error)	1983 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1-3 seats	59,185 (860)	62,362 (594)	60,505 (688)	59,914 (748)	57,670 (910)	59,199 (976)	0.00
1-engine piston 4+ seats	101,466 (857)	106,028 (450)	107,930 (538)	107,983 (656)	106,503 (687)	107,228 (778)	1.11
2-engine piston 1-6 seats	15,621 (259)	16,891 (157)	16,224 (246)	16,749 (246)	16,381 (303)	16,249 (315)	0.79
2-engine piston 7+ seats	7,328 (202)	7,958 (90)	8,141 (153)	8,607 (181)	8,501 (168)	8,660 (150)	3.40
Other piston	221 (10)	229 (11)	212 (17)	114 (29)	140 (24)	143 (14)	-8.34
2-engine turboprop 1-12 seats	2,507 (68)	2,944 (13)	3,339 (41)	3,968 (46)	4,427 (45)	4,733 (72)	13.55
2-engine turboprop 13+ seats	566 (10)	538 (15)	627 (18)	557 (17)	610 (28)	578 (48)	0.42
Other turboprop	56 (3)	96 (3)	123 (10)	134 (5)	149 (28)	142 (38)	20.45
2-engine turbojet	2,115 (27)	2,309 (29)	2,551 (37)	2,808 (68)	3,309 (84)	3,447 (92)	10.26
Other turbojet	364 (34)	343 (6)	441 (13)	362 (23)	687 (73)	451 (91)	4.38
ROTORCRAFT							
Piston	2,822 (155)	3,123 (127)	2,794 (133)	3,250 (173)	2,419 (178)	2,541 (191)	-2.08
Turbine	2,492 (30)	2,740 (50)	3,207 (49)	3,724 (73)	3,749 (140)	3,998 (153)	9.92
Other	4,028 (75)	4,770 (114)	4,945 (142)	5,049 (179)	5,233 (211)	5,923 (207)	8.02
TOTAL AIRCRAFT	198,778 (1,269)	210,339 (789)	211,045 (945)	213,226 (1,078)	209,779 (1,238)	213,293 (1,345)	1.42

NOTE: Column summations may differ from printed totals due to estimation procedures.

hours, and have exhibited little growth over the last five years. On the other hand, small fixed wing twin engine turboprops and twin engine turbojets have shown strong growth in both numbers and usage. In the rotorcraft area, piston-powered rotorcraft have been declining in number and hours flown, while turbine-powered rotorcraft have shown gains in both measures of activity from 1979 to 1983.

The general aviation aircraft fleet consumed an estimated 1,041 million gallons of fuel during 1983, 428 million gallons of aviation gasoline and 613 million gallons of jet fuel. From Figure 1.6, it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. The high rates account for turbojets' burning 32 percent of all fuel consumed in 1983, as shown in Figure 1.7 even though they represent only 2 percent of active aircraft. Fixed wing piston aircraft account for 40 percent of the fuel consumed in 1983 due to their high representation in the general aviation fleet. Table 2-21 shows more detailed fuel consumption estimates and their standard errors.

The general aviation aircraft fleet flew an estimated 4,261 billion miles over the land during 1983. The estimate is based on a mathematical model, incorporating speed differentials by phase of flight, cruising speed by manufacturer/model group of aircraft, and the number of hours flown by manufacturer/model group. Detailed estimates by aircraft type and primary use can be found in Table 2-22.

1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.8. Distance along the vertical axis indicates mean hours per aircraft. Distance along the horizontal axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to the total flying time for each primary use. Aircraft used as commuter air carriers showed the highest individual usage with a mean of 1083 hours flown per aircraft. Aircraft used for instructional purposes, as air taxis and for executive purposes also had fairly high levels of individual usage with mean hours flown per aircraft of 315, 369 and 307, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 48 and 21 percent of the active fleet. While total hours flown for the general aviation fleet declined by about 4 percent from 1982 to 1983, flying time for aircraft in the commuter carrier, air taxi, and other work categories increased significantly. Executive and personal uses showed small gains, while all other uses decreased in hours flown.

1.4.4 Results by Flying Conditions

Survey results indicate that over 76 percent of the total hours logged by the 1983 general aviation fleet were flown in Visual Meteorological (VM) conditions during the day. Aircraft flown in VM night, Instrument Meteorological (IM) day, and IM night conditions accounted for 10 percent, 10 percent, and 4 percent of the total hours flown, respectively. These results are illustrated in Figure 1.9.

Not surprisingly, fixed wing single engine piston aircraft and rotorcraft spend the bulk of their flying time in VM conditions. Single engine piston aircraft fly 92 percent of their flight hours in VM conditions. Fixed wing piston aircraft with two engines, turboprops, and turbojets spend considerably more of their flying time in IM conditions, approximately 35 percent. Table 2-12 contains more data on general aviation annual hours flown by weather and light conditions by aircraft type. In addition, Tables 2-13 and 2-14 give detailed breakdowns of general aviation annual

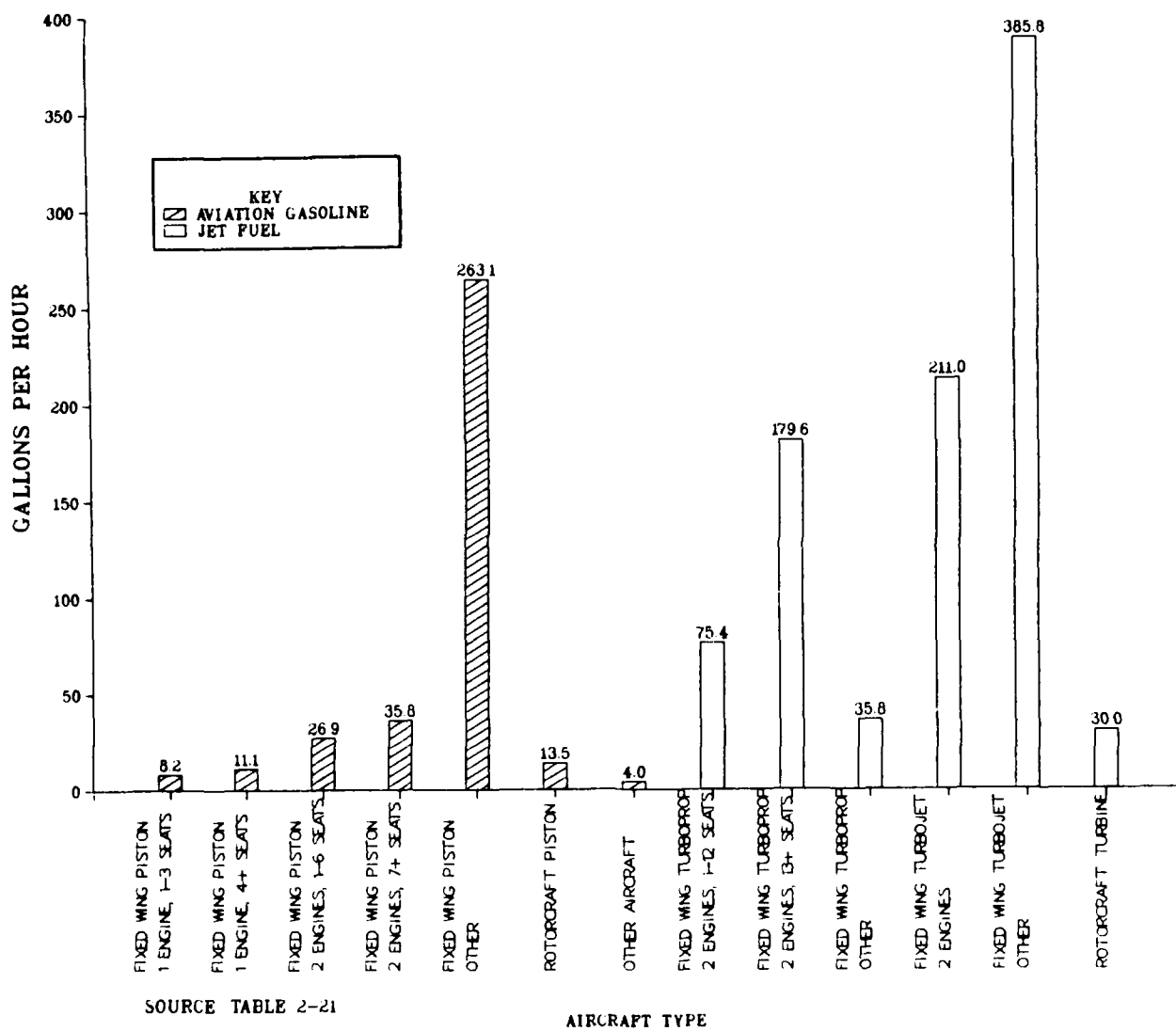
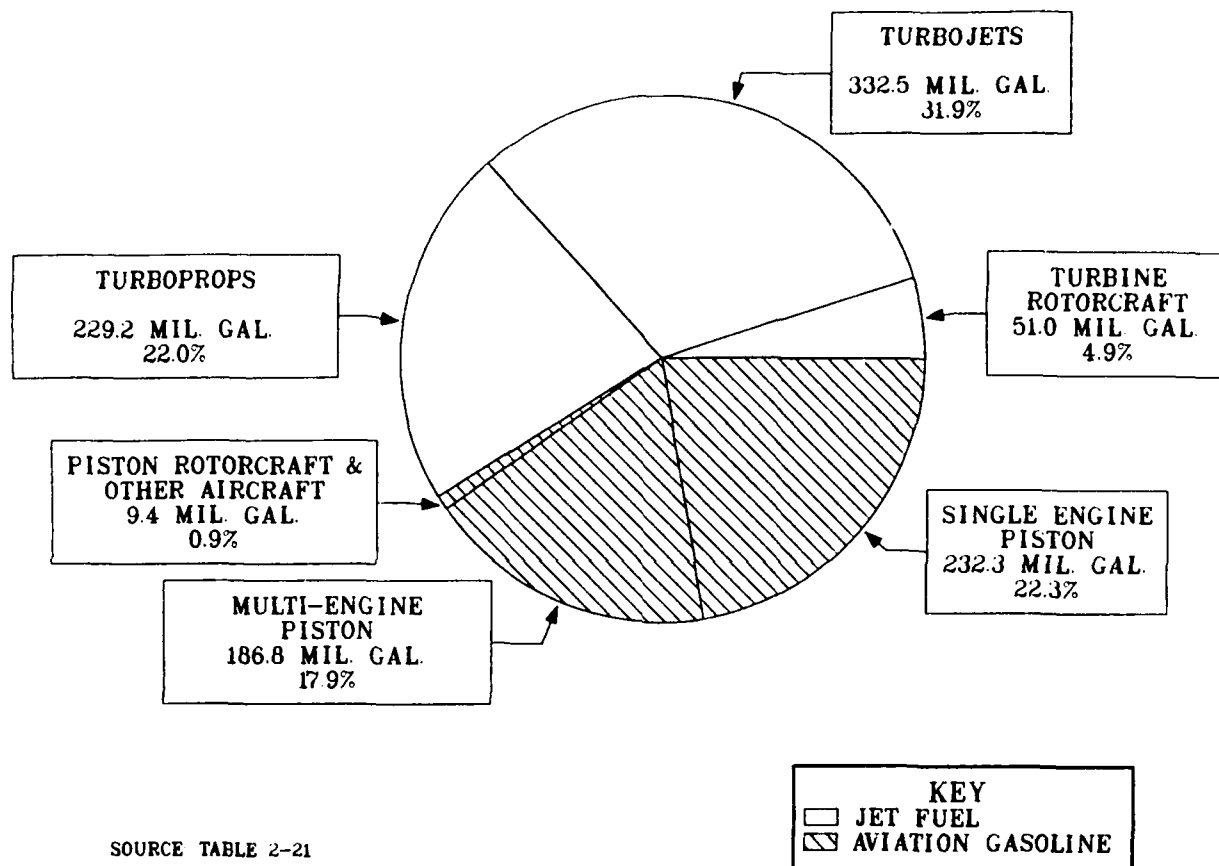


FIGURE 1.6. 1983 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE



SOURCE TABLE 2-21

FIGURE 1.7. 1983 ESTIMATED FUEL CONSUMPTION BY AIRCRAFT TYPE

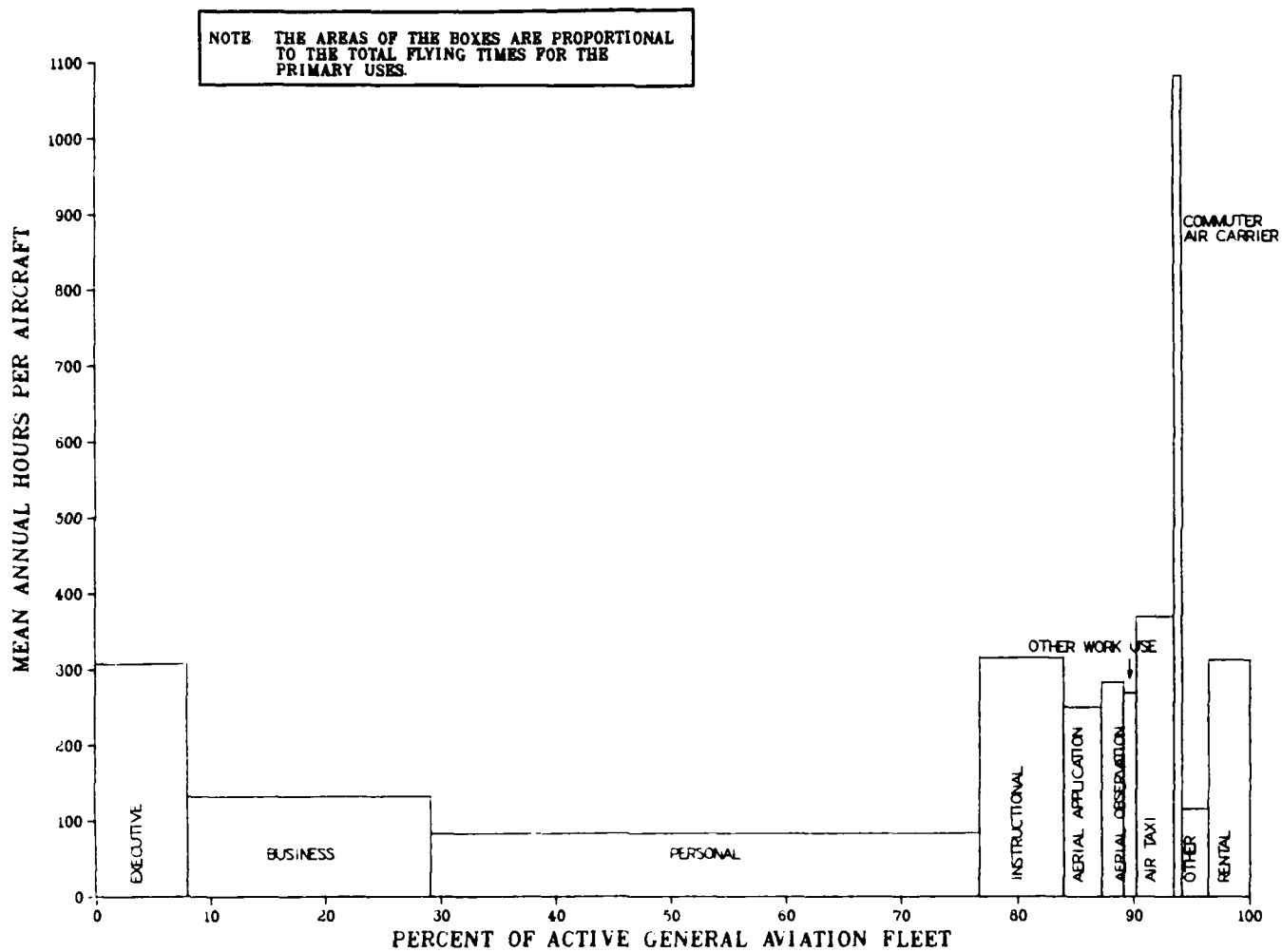


FIGURE 1.8. 1983 GENERAL AVIATION ACTIVITY MEASURES BY PRIMARY USE

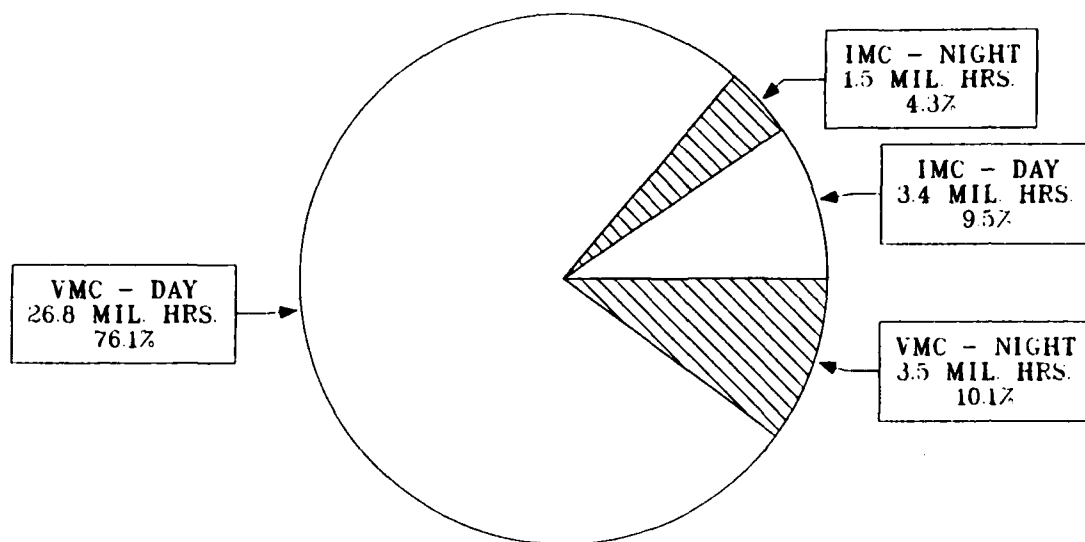


FIGURE 1.9. 1983 GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS

hours flown by weather and light conditions by region of based aircraft and by SDR manufacturer/model group, respectively.

1.4.5 Results by FAA Region

Mean aircraft usage did not differ significantly from region to region with the exception of the European (Foreign) Region, according to Figure 1.10. In the figure, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes Region accounted for more active aircraft than any other region. However, the Southern and Southwestern Regions accounted for more total flight time. The smallest region in continental United States was New England, with only 4 percent of the active aircraft and about 4 percent of the fleet's total flight time.

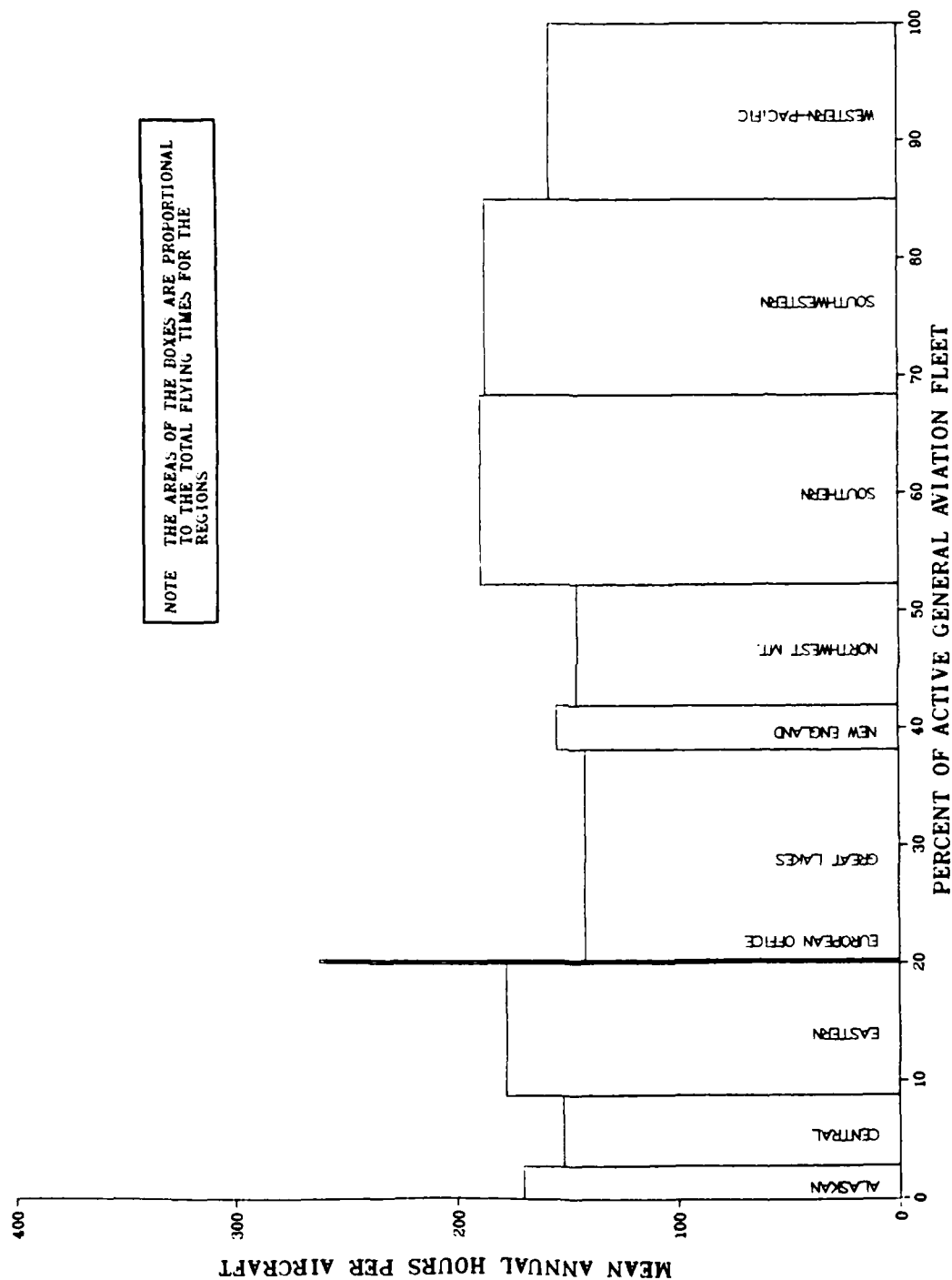
Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of based aircraft.

1.4.6 Results by Avionics Capability

1.4.6.1 Individual Avionics Components

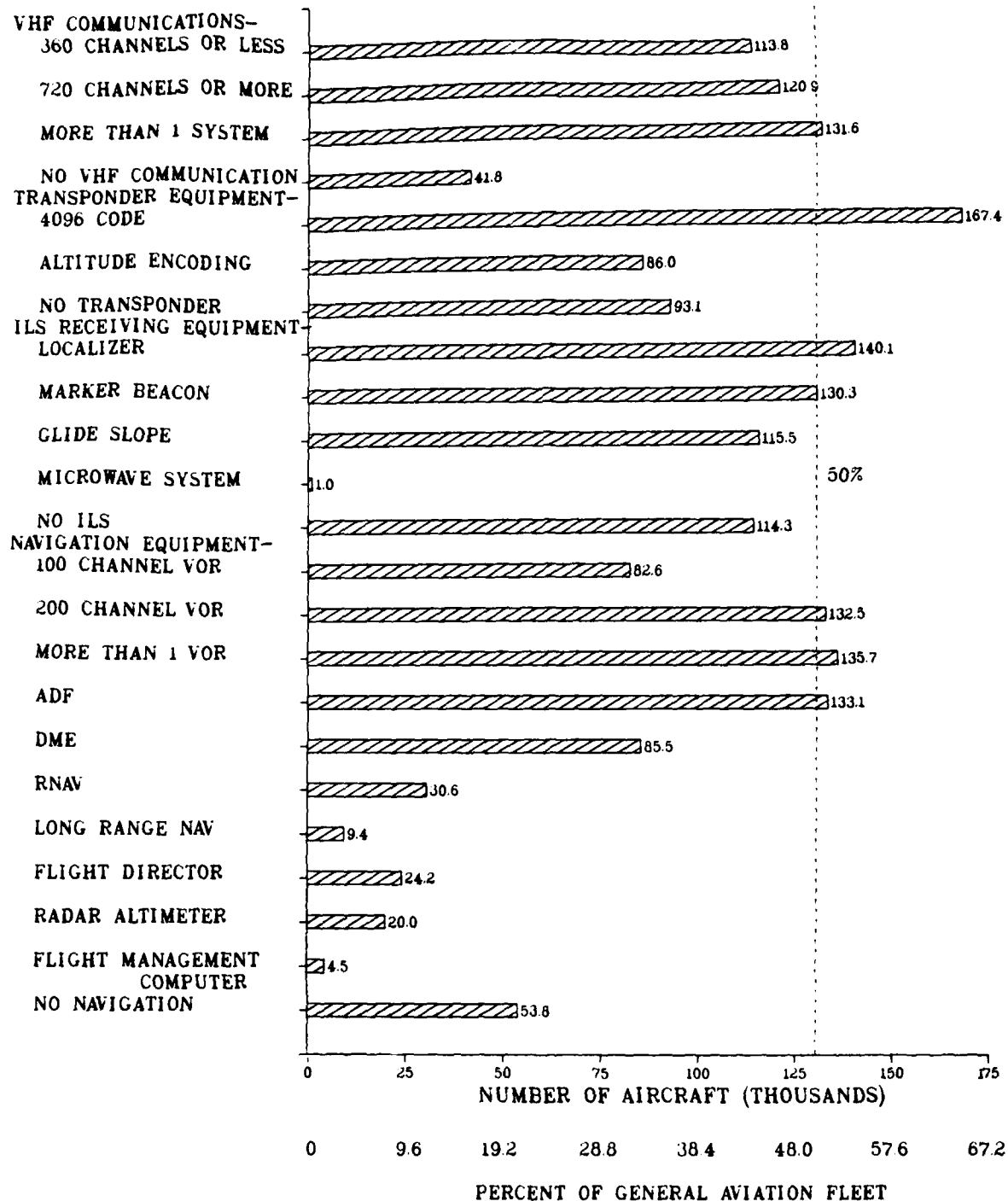
The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.11. Eighty-two percent of the aircraft have two-way VHF communications, 64 percent are equipped with 4096-code transponders, 56 percent have at least one component of an instrument landing system, and 79 percent have some form of navigation equipment. It is evident from comparing the 1983 and 1978 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. In terms of transponder equipment, there was a substantial increase in the percentage of the general aviation aircraft containing 4096 code transponders and altitude encoding equipment, while the percentage of aircraft containing no transponder equipment declined considerably over the five year period. In terms of VOR receivers there was a shift from 100 channel to 200 channel equipment. The proportion of the general aviation fleet with transponders increased from 53.3 percent in 1978 to 64.3 percent in 1983, and the proportion with at least one part of an ILS increased from 51.0 percent to 56.1 percent. The proportion of aircraft having two or more communications systems increased by 8.1 percent from 1978 to 1983. The proportion with two or more VOR receivers increased by 6.5 percent over the same five year period. More detailed breakdowns of avionics by aircraft type, state, region, and primary use are provided in Tables 2-15 through 2-18.

Figure 1.12 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1983 and further, the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1982 and were equipped with transponders. Although a much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, almost all that did were equipped with transponders. In fact, almost 100 percent of IFR flying was performed by aircraft equipped with transponders.



SOURCE TABLE 2-3

FIGURE 1.10. 1983 GENERAL AVIATION ACTIVITY MEASURES BY FAA REGION



SOURCE TABLE 2-16

FIGURE 1.11. AVIONICS EQUIPMENT IN THE 1983
GENERAL AVIATION AIRCRAFT FLEET

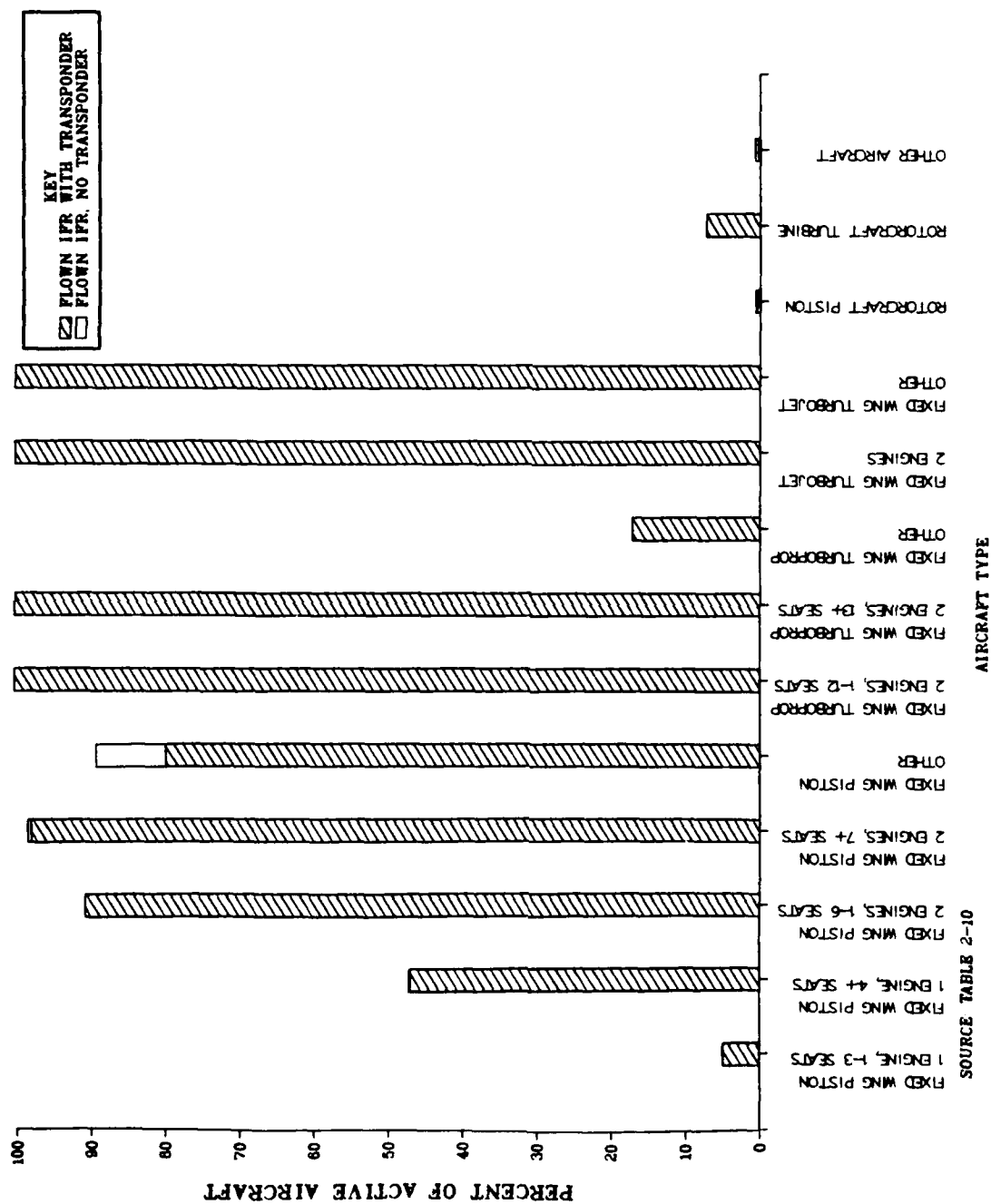


FIGURE 1.12. 1983 GENERAL AVIATION ACTIVE AIRCRAFT
 FLOWN IFR AND TRANSPONDER EQUIPPED

1.4.6.2 Avionics Capability Groups

Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

The methodology and assumptions for developing avionics capability groups are detailed in General Aviation Avionics Statistics.¹ This report also contains a glossary which explains numerous terms relating to avionics equipment and the National Airspace System.

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

Table 2-23 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-23 reveals the following on the GA fleet:

- a. About 25.8 percent of GA aircraft have avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 67 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.

¹General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp.5-10.

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITES
<p><u>Group 1</u> No regulatory avionics</p>	<ol style="list-style-type: none"> Up to and including 12,500 feet mean sea level (MSL) Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV ...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL VFR flight, day and night Uncontrolled airports
<p><u>Group 2</u> Two-way communications</p>	<ol style="list-style-type: none"> Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VFR flight, day and night Non-TCA controlled airports Group III TCA's Helicopters ... with 4096 code transponders...Group III TCA's All helicopters...Group I and II TCA's below 1,000 feet above ground level (AGL) <p>NOTE: Air taxis with navigation system and transponder: Group II TCA's</p> <p>Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace</p> <p>Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace</p>

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<p><u>Group 3</u> Two-way communications Two systems—air taxis VOR or Automatic Direction Finder (ADF) or RNAV</p>	<ol style="list-style-type: none"> Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL IFR flight Non-TCA controlled airways Group III TCA's Helicopters with 4096 code transponders...Group II TCA's All helicopters...Group I and II TCA's below 1,000 feet AGL
<p><u>Group 4</u> Two-way communications Two systems—air taxis 4096 code transponder VOR or RNAV</p>	<ol style="list-style-type: none"> Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL IFR flight Non-TCA controlled airports Group II TCA's Helicopters...Group I TCA's below 1,000 feet AGL
<p><u>Group 5</u> 4096 code transponder Altitude encoding equipment</p>	<ol style="list-style-type: none"> Non-positive controlled airspace VFR flight, day and night Uncontrolled airports Group III TCA's

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

<u>AVIONICS</u>	<u>CAPABILITIES</u>
<u>Group 6</u> Two-way communications 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters...Group I TCA's
<u>Group 7</u> Two-way communications Two systems—air taxis 4096 code transponder Altitude encoding equipment VOR	1. Non-positive controlled airspace VOR airways 2. IFR flight 3. Group I TCA's
<u>Group 8</u> Two-way communications Two systems—air taxis 4096 code transponder Altitude encoding equipment VOR or RNAV DME	1. Positive controlled airspace Jet routes RNAV...RNAV routes 2. IFR flight 3. Group I TCA's

TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS

<u>AVIONICS</u>	<u>CAPABILITIES</u>
<u>Group 1</u> Localizer	Partial use of airport ILS
<u>Group 2</u> Localizer Marker Beacon	Partial use of airport ILS
<u>Group 3</u> Localizer Marker Beacon Glide Slope	Full use of airport ILS
<u>Group 4</u> ILS Radar Altimeter	Landing approach in Category III ¹ weather conditions at airports with Category III equipment
<u>Group 5</u> Long Range RNAV	Area navigation over long distances and large bodies of water
<u>Group 6</u> Radar Altimeter	Determination of altitude above level of terrain
<u>Group 7</u> Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at air- ports with mountains and large buildings nearby
<u>Group 8</u> ILS MLS	Backup landing systems
<u>Group 9</u> Long Range RNAV MLS	Sophisticated navigational and landing capabilities

¹See Appendix D, "Weather Category Definitions," General Aviation Avionics Statistics (1979 Data). (Washington, DC, 1981).

- b. About 78 percent of GA aircraft are equipped to fly IFR.
- c. Almost sixteen percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 22 percent can land at either non-TCA controlled airports or Group III TCA's. Approximately 30 percent can land at any type of airport except a Group I TCA. About 32 percent can land at Group I TCA's. This latter proportion has increased constantly over the past 5 years.
- d. In general, Table 2-23 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sophisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e. NO GROUP), 74.3 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 93 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.

Tables 2-24 through 2-33 show distributions of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1983, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

- a. As in prior years, as the hierarchical CG's increase in sophistication, the predominant uses also change from personal, to business and personal, to executive and business (Table 2-24).
- b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal, to business, to business and executive. For example, executive aircraft alone compose 46 percent of the aircraft reporting both a radar altimeter and a complete ILS and about 45 percent of the aircraft reporting long range navigation equipment, yet executive aircraft compose only 6.4 percent of the fleet (Table 2-29).
- c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in avionics equipment (Tables 2-25 and 2-30).
- d. Aircraft in the more sophisticated groups contain newer aircraft on the average than less sophisticated CG's (Tables 2-26 and 2-31).
- e. Computed aircraft type increases in sophistication as the level of avionics increases. (Tables 2-27 and 2-32).

TABLE 1-6. COMPUTED AIRCRAFT TYPE

TYPE	DESCRIPTION
1.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

1.4.7 Other Results

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 220 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-19. Appendix D contains definitions of these groups. The report also includes a table (Table 2-20) on mean hours and number of active engines for 73 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.

2. TABLES OF RESULTS

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN
BY
TYPE OF AIRCRAFT
1983

PAGE 1 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING									
FIXED WING - PISTON									
1 ENG: 1-3 SEATS	84221	59199	976	8189837	398873	4.9	139.7	6.4	4.6
1 ENG: 4+ SEATS	119549	107228	778	14959308	441249	2.9	138.8	4.0	2.9
1 ENGINE: TOTAL	203770	166427	1248	23149145	594811	2.6	139.1	3.5	2.5
2 ENG: 1-6 SEATS	18691	16249	315	3013160	192120	6.4	187.3	11.6	6.2
2 ENG: 7+ SEATS	10130	8660	150	2716694	235413	8.7	318.3	27.3	8.6
2 ENGINE: TOTAL	28821	24910	349	5729854	303857	5.3	230.5	11.9	5.2
PISTON: OTHER	327	143	14	32467	9711	29.9	240.4	32.3	13.4
PISTON: TOTAL	232918	191480	1296	28911466	868000	2.3	150.6	3.4	2.2
FIXED WING - TURBOPROP									
2 ENG: 1-12 SEATS	4868	4733	72	1431297	92972	6.5	301.4	19.2	6.4
2 ENG: 13+ SEATS	669	578	48	658671	118300	18.0	1139.1	178.6	15.7
2 ENGINE: TOTAL	5537	5311	87	2089968	150462	7.2	388.3	25.0	6.5
TURBOPROP: OTHER	204	142	38	83319	31050	37.3	578.5	131.2	22.7
TURBOPROP: TOTAL	5741	5453	95	2173287	153632	7.1	389.4	24.7	6.3

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN

BY
TYPE OF AIRCRAFT
1983

PAGE 2 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING - TURBOJET									
2 ENGINE TURBOJET	3655	3447	92	1349589	91511	6.8	391.6	24.2	6.2
TURBOJET: OTHER	720	451	91	123656	31170	25.2	273.7	40.2	14.7
TURBOJET: TOTAL	4375	3898	130	1473245	96673	6.6	382.2	22.5	5.9
FIXED WING: TOTAL	243034	200831	1306	32557997	692223	2.1	160.9	3.3	2.1
ROTORCRAFT									
PISTON	5413	2541	191	571725	49213	8.6	221.1	15.0	6.8
TURBINE	4582	3998	153	1699652	151485	8.9	431.6	34.4	8.0
ROTORCRAFT: TOTAL	9995	6540	245	2271377	159278	7.0	350.2	21.9	6.3
OTHER	7476	5923	207	419792	49392	11.8	71.1	8.0	11.3
TOTAL	260505	213293	1345	35249171	712026	2.0	164.0	3.2	2.0

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1983

PAGE 1 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	2594	416	501400	124108
ALASKA	6075	598	1072247	161782
ARIZONA	4737	562	789778	137902
ARKANSAS	2977	459	594775	134849
CALIFORNIA	29236	1321	4514941	342201
COLORADO	4407	532	757622	159429
CONNECTICUT	1426	311	255537	97530
DELAWARE	809	237	181435	71474
DC	58	47	9787	8022
FLORIDA	12688	896	2399720	303091
GEORGIA	4955	578	875710	191009
HAWAII	381	152	96912	34329
IDAHO	2146	378	268195	57133
ILLINOIS	7700	706	1142295	206837
INDIANA	4207	530	722507	148279
IOWA	3165	469	370407	73615
KANSAS	4519	555	821596	189402
KENTUCKY	1752	338	240256	53580
LOUISIANA	3972	520	1531309	317510
MAINE	1263	288	141178	42385
MARYLAND	3116	467	425809	101338

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1983

PAGE 2 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
MASSACHUSETTS	2737	432	502709	157439
MICHIGAN	7079	677	870500	128618
MINNESOTA	4733	563	610427	131886
MISSISSIPPI	2706	441	566897	150538
MISSOURI	3858	507	570307	122177
MONTANA	2538	418	374912	94211
NEBRASKA	1178	290	156887	56481
NEVADA	2288	396	334317	78648
NEW HAMPSHIRE	1430	313	202502	55778
NEW JERSEY	4021	525	980854	211778
NEW MEXICO	2387	396	371904	133403
NEW YORK	6045	626	993772	171064
NORTH CAROLINA	4344	537	793062	142320
NORTH DAKOTA	1734	341	313924	112936
OHIO	7478	693	1028558	143668
OKLAHOMA	5634	626	880482	186235
OREGON	4689	552	596065	106394
PENNSYLVANIA	6174	643	946871	167438
RHODE ISLAND	510	197	62989	32099
SOUTH CAROLINA	1686	337	258878	65975

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1983

PAGE 3 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
SOUTH DAKOTA	1360	306	145619	44598
TENNESSEE	2935	431	689264	138643
TEXAS	20414	1117	3061276	272749
UTAH	1440	311	245951	83586
VERMONT	660	218	72273	27595
VIRGINIA	2554	419	454859	121816
WASHINGTON	5645	605	716866	120051
WEST VIRGINIA	1229	286	271911	98542
WISCONSIN	3782	495	535238	135207
WYOMING	1192	285	222566	70459
PUERTO RICO	362	161	87042	51141
OTHER U. S. TERRITORIES	183	115	40449	26762
FOREIGN	938	226	260492	105578
TOTAL	213293	1345	35249171	712026

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 3
GENERAL AVIATION TOTAL HOURS FLOWN
BY
REGION OF BASED AIRCRAFT
1983

REGION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALASKAN	6075	598	1072247	161782
CENTRAL	12720	915	1924176	234884
EASTERN	24006	1219	4280794	357763
EUROPEAN OFFICE	508	153	137540	56249
GREAT LAKES	38072	1472	5373309	363859
NEW ENGLAND	8025	733	1251303	190833
NORTHWEST MT.	22064	1160	3196441	261345
SOUTHERN	34358	1412	6471928	437901
SOUTHWESTERN	35478	1438	6592042	490327
WESTERN-PACIFIC	36820	1454	5801550	373905
TOTAL	213293	1345	35249171	712026

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1983

PAGE 1 OF 3

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL	TRIAL	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG. 1-3 SEATS												
EST. TOT. HOURS	33723	286751	2366116	2848201	1385485	319260	293248	0	40258	73464	592535	8189837
% STD. ERROR	74.8	19.7	5.5	11.2	13.7	29.5	28.4	0.0	80.5	32.5	23.7	4.9
1 ENG. 4+ SEATS												
EST. TOT. HOURS	513128	3730199	5551421	1640988	85016	565466	115710	182045	710359	217533	1567338	14959308
% STD. ERROR	17.1	5.9	4.4	13.7	81.2	30.1	53.6	56.2	19.0	46.0	14.4	2.9
1 ENGINE TOTAL												
EST. TOT. HOURS	547287	4013598	7911865	4489672	1470278	883801	407520	182045	750740	289486	2160750	23149145
% STD. ERROR	16.6	5.7	3.5	8.7	13.3	21.4	25.3	56.2	18.4	34.2	12.3	2.6
2 ENG. 1-6 SEATS												
EST. TOT. HOURS	538728	1203556	248568	94273	17179	32064	653	213284	507324	43591	135760	3013160
% STD. ERROR	16.6	9.4	17.0	38.0	66.6	52.1	133.0	47.3	24.3	62.7	56.4	6.4
2 ENG. 7+ SEATS												
EST. TOT. HOURS	972743	434125	16588	21463	8598	17951	6746	887075	509257	21187	36336	2716694
% STD. ERROR	13.1	18.2	35.8	66.5	57.3	47.0	58.9	32.2	18.9	42.1	61.4	8.7
2 ENGINE TOTAL												
EST. TOT. HOURS	1501676	1631406	265569	116850	26280	50369	7417	894679	1018677	65744	172388	5729854
% STD. ERROR	10.4	8.3	16.1	33.1	43.9	37.0	56.5	26.8	15.4	44.4	46.7	5.3
PISTON OTHER												
EST. TOT. HOURS	188	79	0	0	4220	25	1880	12670	2391	2181	8748	32467
% STD. ERROR	136.5	63.9	0.0	0.0	23.0	203.9	90.5	66.1	107.4	44.1	41.3	29.9
PISTON TOTAL												
EST. TOT. HOURS	2038129	5637257	8176338	4609806	1505213	936962	416692	1082160	1769720	358146	2341394	28911466
% STD. ERROR	9.0	4.7	3.4	8.5	12.9	20.2	24.8	24.0	11.8	29.0	11.9	2.3
FIXED WING - TURBOPROP												
2 ENG. 1-12 SEATS												
EST. TOT. HOURS	1013140	172331	3410	0	0	0	7950	0	188761	35385	5024	1431297
% STD. ERROR	10.0	30.9	88.7	0.0	0.0	0.0	108.9	0.0	29.9	63.7	91.9	6.5

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN

BY
AIRCRAFT TYPE AND PRIMARY USE
1983

PAGE 2 OF 3

AIRCRAFT TYPE	EXECU- TIVE	BUSI- NESS	PERSO- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
2 ENG: 13+ SEATS												
EST. TOT. HOURS	123084	0	139	0	0	0	0	521438	0	14011	0	858671
% STD. ERROR	24.8	0.0	276.1	0.0	0.0	0.0	0.0	24.4	0.0	123.2	0.0	18.0
2 ENGINE: TOTAL												
EST. TOT. HOURS	1133978	172331	3555	0	0	0	7950	521438	188761	48586	5024	2089968
% STD. ERROR	9.4	30.9	85.1	0.0	0.0	0.0	108.9	24.4	29.9	53.1	91.9	7.2
TURBOPROP: OTHER												
EST. TOT. HOURS	1748	0	238	0	77264	467	0	1557	765	1280	0	83319
% STD. ERROR	34.8	0.0	69.9	0.0	29.9	333.9	0.0	39.6	56.0	207.9	0.0	37.3
TURBOPROP: TOTAL												
EST. TOT. HOURS	1135854	172331	3761	0	77264	467	7950	523884	189582	50023	5024	2173287
% STD. ERROR	9.3	30.9	83.3	0.0	29.9	333.9	108.9	24.1	29.8	52.2	91.9	7.1
FIXED WING - TURBOJET												
2 ENGINE TURBOJET												
EST. TOT. HOURS	1221439	80189	13116	0	0	12435	0	0	21183	1225	0	1349589
% STD. ERROR	7.1	68.5	133.4	0.0	0.0	133.4	0.0	0.0	99.4	88.6	0.0	6.8
TURBOJET: OTHER												
EST. TOT. HOURS	89572	11041	22357	0	0	0	0	0	0	471	0	123658
% STD. ERROR	23.8	73.7	81.2	0.0	0.0	0.0	0.0	0.0	0.0	106.9	0.0	25.2
TURBOJET: TOTAL												
EST. TOT. HOURS	1321053	98778	35987	0	0	12435	0	0	21183	1702	0	1473245
% STD. ERROR	6.8	58.9	70.1	0.0	0.0	133.4	0.0	0.0	99.4	72.1	0.0	6.6
FIXED WING: TOTAL												
EST. TOT. HOURS	4472568	5895615	8207777	4609808	1561045	949757	424639	1590604	1980227	410903	2347322	32557997
% STD. ERROR	5.6	4.7	3.4	8.5	12.7	20.0	24.4	19.5	11.0	26.1	11.8	2.1
ROTORCRAFT												
PISTON												
EST. TOT. HOURS	3485	25693	22535	101006	196361	139505	46321	182	5462	23452	3310	571725
% STD. ERROR	84.7	38.1	34.0	31.3	15.5	23.9	49.7	233.9	91.3	41.0	65.6	8.6
TURBINE												
EST. TOT. HOURS	781797	35087	1567	61288	6699	42083	158974	9945	546713	93157	0	1699652
% STD. ERROR	19.3	54.8	125.9	71.0	31.6	75.3	43.0	38.0	21.4	44.7	0.0	8.9

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN
BYAIRCRAFT TYPE AND PRIMARY USE
1983

PAGE 3 OF 3

AIRCRAFT TYPE	EXECU- TIVE	BUSI- NESS	PERSO- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
ROTORCRAFT: TOTAL												
EST. TOT. HOURS	785829	60417	24014	162988	203517	181048	206885	10161	551873	116584	3310	2271377
% STD. ERROR	19.2	34.4	32.7	29.5	14.8	24.0	34.1	40.5	21.1	35.1	65.6	7.0
OTHER												
EST. TOT. HOURS	4280	1239	239190	90417	0	9514	11720	0	678	27605	35512	419792
% STD. ERROR	68.7	73.0	12.9	41.0	0.0	43.9	40.2	0.0	88.3	48.7	49.1	11.8
TOTAL												
EST. TOT. HOURS	5240774	5956270	8477292	4884586	1761709	1137523	642007	1601651	2528288	553164	2389479	35249171
% STD. ERROR	3.9	3.6	2.9	5.7	8.5	14.6	13.2	10.8	5.4	19.5	7.5	2.0

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT
BELONGING TO MANUFACTURER/MODEL GROUPS OF FEWER THAN
20 AIRCRAFT IN SIZE FOR AIRCRAFT XX WHERE XX STANDS FOR

- 01 FIXED WING PISTON, 1 ENGINE, 1-3, SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE, 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 1 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
OTHER 01	13748	440987	73081	16.6	64.0	9.7	15.2
OTHER 02	3292	181750	48545	26.7	77.1	18.9	24.5
OTHER 03	1190	34919	22687	65.0	87.8	43.6	49.6
OTHER 04	658	110338	58845	51.5	253.6	115.8	45.6
OTHER 05	76	7327	4141	56.5	182.4	95.5	52.4
OTHER 06	1047	192979	39940	20.7	209.6	38.8	18.5
OTHER 07	449	621768	129171	20.8	1816.8	216.9	11.9
OTHER 08	133	13258	9643	72.7	301.7	69.4	23.0
OTHER 09	1547	454304	73607	16.2	347.7	49.1	14.1
OTHER 10	490	46759	23942	51.2	189.7	40.2	21.2
OTHER 11	1904	10797	5329	49.4	25.6	10.2	39.9
OTHER 12	1180	444343	95251	21.4	530.4	76.6	14.4
OTHER 13	3606	174430	27809	15.9	65.6	9.5	14.4
AERORSJ2	33	247	65	26.2	26.4	3.6	13.8
AGUSTAA109	42	3744	794	21.2	117.9	21.4	18.2
AIRPTSA	235	14789	4866	32.9	105.3	28.6	27.2
AIRSPC18	22	259	76	29.4	28.2	5.2	18.3
AIRTRCAT300	362	130822	18995	14.5	361.4	52.5	14.5
AMD FALC10	136	34530	8264	23.9	253.9	60.8	23.9
AMD FALC20	201	89839	18469	20.6	447.0	91.9	20.6
AMD FALC50	88	25103	7295	29.1	285.3	82.9	29.1

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 2 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
AMTR TMK	27	67	50	74.9	30.0	12.3	40.9
ARCTICS1A	91	2024	359	17.7	55.4	8.1	14.7
ARCTICS1B1	23	437	127	29.0	43.0	6.9	16.0
ARONCA15	201	12344	8029	65.0	118.5	52.4	44.2
ARONCA58	149	5386	3182	59.1	88.3	33.7	38.2
ARONCA65	138	3114	732	23.5	41.1	6.3	15.3
ARONCAC3	59	301	48	16.0	22.4	2.5	11.1
AVIANWFALCON	26	650	86	13.2	31.6	3.7	11.7
AYRES S2	814	138134	35200	25.5	230.4	41.2	17.9
AYRES S2T	58	40706	10074	24.7	701.8	173.7	24.7
BAG B206	32	3292	760	23.1	137.0	23.5	17.2
BALWKSFIREFY	1095	34391	5698	16.6	33.5	5.2	15.5
BEECH 17	188	4011	407	10.1	43.2	2.8	6.6
BEECH 18	885	147671	13068	8.8	314.6	23.8	7.6
BEECH 200	815	358817	36350	10.1	440.3	44.6	10.1
BEECH 23	2826	381224	75157	19.7	140.7	27.4	19.5
BEECH 33	1668	232122	40505	17.4	145.6	24.8	17.0
BEECH 35	6849	667238	52701	7.9	106.1	7.8	7.4
BEECH 36	1940	382774	43136	11.3	197.7	22.2	11.2
BEECH 45	288	6117	3991	65.2	50.2	23.6	47.0
BEECH 50	337	22674	8532	37.6	119.1	21.5	18.0

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 3 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 55	2246	383561	63437	16.5	178.1	28.9	16.3
BEECH 58	1427	400339	59033	14.7	281.5	41.4	14.7
BEECH 60	429	64018	7895	12.3	150.5	18.1	12.1
BEECH 65	137	17809	3562	20.0	153.5	27.8	18.1
BEECH 77	238	57362	7148	12.5	246.9	22.2	9.0
BEECH 80	187	25162	3598	14.3	198.8	24.6	12.4
BEECH 90	1070	333581	35536	10.7	311.8	33.2	10.7
BEECH 95	460	34397	5551	16.1	74.8	12.1	16.1
BELL 204	159	13801	2448	17.7	125.7	20.1	16.0
BELL 208	2177	902758	94039	10.4	430.4	43.2	10.0
BELL 222	54	21639	2884	13.3	422.5	51.3	12.1
BELL 47	1417	161751	36616	22.6	233.1	39.3	16.9
BLANCA11	891	19713	9748	49.4	57.6	20.5	35.5
BLANCA1413	264	4790	821	17.1	40.6	5.4	13.4
BLANCA1419	273	11695	2621	22.4	59.9	12.7	21.1
BLANCA17	1052	72103	16846	23.4	82.9	16.8	20.3
BLANCA7	5801	396046	35298	8.9	100.1	8.1	8.1
BLANCA8	704	84699	28070	33.1	149.7	45.1	30.1
BNORM BN2	120	30038	28080	93.5	250.3	234.0	93.5
BNORM BN2MK3	11	7998	2162	27.0	727.1	196.5	27.0
BOEING75	1911	57635	16176	28.1	59.9	12.8	21.4

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 4 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BOEINGC97	18	286	50	17.4	41.2	5.3	13.0
BUKER 131	32	410	151	36.7	36.1	5.6	15.5
CAMRONMODELO	152	4678	1067	22.8	48.4	6.6	13.7
CESSNA120	869	26973	3622	13.4	43.7	4.9	11.3
CESSNA140	2327	83628	16853	20.2	54.3	8.4	15.4
CESSNA150	19623	3857891	296593	7.7	218.4	16.1	7.4
CESSNA170	2436	124949	16526	13.2	60.8	7.3	12.0
CESSNA172	24908	4111048	290782	7.1	178.0	12.3	6.9
CESSNA175	1301	61525	8886	14.4	63.1	7.7	12.2
CESSNA177	2903	441916	85323	19.3	156.3	29.9	19.1
CESSNA180	2673	247893	68420	27.6	122.8	32.2	26.2
CESSNA182	13769	1447023	114256	7.9	112.8	8.6	7.7
CESSNA185	1592	284064	103343	36.4	178.8	65.0	36.4
CESSNA188	1859	313815	49272	15.7	193.2	26.4	13.7
CESSNA205	246	11611	3779	32.5	47.2	15.4	32.5
CESSNA208	3011	575280	104301	18.1	200.2	35.6	17.8
CESSNA207	391	116976	45234	38.7	418.9	138.8	33.1
CESSNA210	6174	841747	74935	8.9	142.0	12.3	8.6
CESSNA305	273	51214	18710	36.5	187.8	68.5	36.5
CESSNA310	3224	442604	85131	19.2	163.5	30.3	18.5
CESSNA320	329	21617	17223	79.7	67.9	53.8	79.2

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 5 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESSNA335	50	8994	1376	15.3	179.9	27.5	15.3
CESSNA337	1247	150743	20552	13.6	132.2	16.7	12.6
CESSNA340	951	166869	23779	14.3	181.8	24.4	13.4
CESSNA401	243	61258	19732	32.2	256.9	81.1	31.6
CESSNA402	742	439523	88453	20.1	600.4	119.6	19.9
CESSNA411	189	18836	3344	17.8	155.4	18.1	11.6
CESSNA414	779	189858	39783	21.0	243.7	51.1	21.0
CESSNA421	1321	350786	44687	12.7	280.0	33.2	11.9
CESSNA425	130	32919	6924	21.0	255.9	53.5	20.9
CESSNA441	231	78900	24769	31.4	341.6	107.2	31.4
CESSNA500	537	225542	35929	15.9	441.0	64.6	14.6
CESSNAT50	69	436	175	40.2	24.4	4.9	20.1
COMETH185	106	1196	213	17.8	36.6	5.0	13.7
CONAERLA4	467	47114	9309	19.8	111.7	19.3	17.3
CURTISC46	45	5876	2236	38.1	194.5	63.6	32.7
CURTISTRVAIR	189	2413	387	16.0	64.9	7.6	11.7
CVAC 240	37	421	165	39.2	66.7	12.5	18.8
CVAC 340	20	1384	691	50.0	185.9	33.1	17.8
CVAC BT13	97	1218	130	10.7	41.2	2.8	6.8
CVAC P4Y	8	459	0	0.0	73.7	0.0	0.0
DHAV DHC1	84	5309	1135	21.4	90.3	18.3	20.2

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
DHAV DHC2	291	43747	6868	15.7	245.1	29.9	12.2
DHAV DHC3	21	7501	3692	49.2	476.3	198.0	41.6
DHAV DHC6	88	85828	32549	37.9	1062.6	373.4	35.1
DHAVXXDH82	79	2668	377	14.1	52.4	5.4	10.2
DOUG A26	26	483	123	25.5	42.4	6.7	15.9
DOUG DC3	377	36508	8164	22.4	204.7	30.4	14.8
DOUG DC4	79	929	487	52.4	55.8	18.9	33.9
DOUG DC6	85	3881	3073	79.2	117.1	84.8	72.4
DOUG DC7	37	5666	1651	29.1	216.6	55.9	25.8
EAGLE DW	72	5854	2086	35.6	95.1	28.0	29.5
EIRVDN20	112	6357	588	9.3	65.7	5.5	8.3
EMAIR MA1	22	8130	2424	29.8	418.3	107.2	25.6
ENSTRMF28	319	32243	14977	46.4	118.2	50.9	43.8
FLEET 168	25	255	49	19.0	28.4	3.1	10.9
FOMDC04AT	6	0	0	0.0	0.0	0.0	0.0
FRCHLD24	288	3229	514	15.9	37.0	4.5	12.1
FRCHLDC119	34	1264	303	24.0	75.0	4.1	5.5
FRCHLDM62	222	3927	481	12.2	40.8	4.3	10.6
GLASFLH301	114	4966	657	13.2	58.9	6.6	11.2
GRUMAVAA1	578	34295	13785	40.2	85.7	20.7	24.2
GRUMAVAA5	326	27882	9399	33.7	113.3	13.9	12.3

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
GRUMAVG164	656	153070	38328	25.0	233.3	58.4	25.0
GRUMAVTBM	34	324	136	41.9	30.9	7.3	23.5
GULSTM112	704	61933	11333	18.3	98.4	15.6	15.9
GULSTM500	330	74521	43092	57.8	240.2	137.1	57.1
GULSTM680	328	44764	15092	33.7	206.7	64.5	31.2
GULSTM680TP	123	10540	1477	14.0	85.7	12.0	14.0
GULSTM690TP	476	105069	18130	17.3	220.7	38.1	17.3
GULSTMAA1	601	31450	15101	48.0	71.3	30.3	42.5
GULSTMAA5	1372	129142	23108	17.9	104.2	17.3	16.6
GULSTMG1159	178	93466	11354	12.1	525.1	63.8	12.1
GULSTMG159	132	58086	6907	11.9	440.0	52.3	11.9
HELIO H391	24	639	194	30.3	65.3	16.7	25.5
HILLERFH1100	76	1347	768	57.0	66.4	12.2	18.3
HILLERUH12	620	133976	18586	13.9	316.9	37.5	11.8
HUGHES269	732	159299	24003	15.1	298.5	40.3	13.5
HUGHES369	645	216391	111470	51.5	371.6	182.5	49.1
HWKSLYDH104	33	0	0	0.0	0.0	0.0	0.0
HWKSLYDH114	7	2105	0	0.0	1654.0	0.0	0.0
HWKSLYDH125	189	60002	14008	23.3	317.5	74.1	23.3
INTRCP200	30	1856	178	10.7	59.4	5.8	9.8
ISRAEL1124	176	49076	2996	6.1	278.8	17.0	6.1

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
JBMSTRDGA15	82	606	146	24.1	32.6	4.2	12.8
LAIKFN10	36	250	91	36.3	40.5	10.9	27.0
LEAR 35	354	158374	19340	12.2	447.4	54.6	12.2
LKHEED1329	95	22076	5139	23.3	292.2	39.4	13.5
LKHEED18	68	510	281	55.1	30.0	7.8	26.1
LKHEEDT33	47	11	7	66.7	5.0	0.0	0.0
LUSCOM8	2144	115280	44253	38.4	88.7	32.8	36.9
MARTIN404	22	0	0	0.0	0.0	0.0	0.0
MAULE M5	421	33253	9712	29.2	97.3	26.4	27.1
MCLISHFUNK8	139	2502	388	15.5	39.5	4.6	11.7
MNCUP90	68	504	206	40.9	25.9	8.4	32.5
MNMITEM18	150	1684	450	27.1	23.2	3.5	15.1
MOONEYM20	5923	637207	49096	7.7	116.4	8.3	7.1
MTSBSIMU2	365	70490	18866	26.8	200.1	51.5	25.8
MULTECD16	46	2139	259	12.1	67.2	5.9	8.8
NAMER F51	136	2960	925	31.2	56.0	8.6	15.4
NAMER NA260	56	1959	374	19.1	49.6	7.4	15.0
NAMER T6	517	25268	4197	16.6	61.8	9.5	15.4
NAVIONNAVION	575	17438	5690	32.6	49.3	10.5	21.2
NORD SV4	44	1000	163	16.3	34.6	4.7	13.6
NORWST65	58	930	116	12.5	41.4	3.9	9.5

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
ORLHELH19	75	2542	2237	88.0	203.4	40.4	19.9
PICARDAX6	153	6389	2770	43.4	51.2	21.9	42.9
PIPER 600	388	97318	17377	17.9	250.8	44.8	17.9
PIPER J2	53	288	51	17.9	20.9	2.7	13.1
PIPER J3	4093	113794	23227	20.4	46.3	8.3	18.0
PIPER J4	239	1994	687	34.4	31.8	7.2	22.5
PIPER J5	339	3086	3178	103.0	38.7	3.0	23.2
PIPER PA12	1312	56061	20506	36.6	67.6	21.6	32.0
PIPER PA15	185	3339	1180	35.3	37.8	10.6	27.9
PIPER PA16	355	5613	1792	31.9	24.2	6.4	26.4
PIPER PA17	110	2437	248	10.2	35.2	2.5	7.0
PIPER PA18	3491	453794	79023	17.4	173.4	27.2	15.7
PIPER PA20	447	22171	3762	17.0	68.5	10.1	14.8
PIPER PA22	4829	277666	96352	34.7	85.8	28.2	32.8
PIPER PA23	3501	587562	91419	15.6	200.9	29.4	14.6
PIPER PA24	3180	284764	31967	11.2	96.4	10.1	10.5
PIPER PA25	1329	167772	34736	20.7	174.0	26.1	15.0
PIPER PA28	22239	2967320	228673	7.7	141.4	10.8	7.7
PIPER PA30	1276	144765	26889	18.6	137.0	22.1	16.1
PIPER PA31	2125	768363	147035	19.1	410.1	80.5	19.6
PIPER PA31T	587	174793	30010	17.2	308.3	51.4	16.7

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
PIPER PA32	4098	737525	105191	14.3	185.0	26.1	14.1
PIPER PA34	2208	543032	60496	11.1	248.2	27.4	11.1
PIPER PA38	411	59378	17881	29.8	145.6	43.1	29.6
PIPER PA38	1578	458237	100082	21.9	304.4	65.1	21.4
PIPER PA44	346	124218	62577	50.4	410.9	195.6	47.6
PROPTJ200	65	3755	433	11.5	72.4	7.0	9.7
RAVEN S50	87	1010	353	34.9	27.0	8.5	31.6
RAVEN S55	707	32872	13089	39.8	52.7	20.8	39.5
RKWE1700	22	2893	666	23.0	151.4	30.6	20.2
RKWE1NA265	337	130221	24961	19.2	386.4	74.1	19.2
ROBSINR22	218	67570	7013	10.4	399.3	35.7	8.9
RYAN ST3	161	2002	673	33.6	28.4	6.0	21.1
RYAN STA	34	212	41	19.2	19.6	1.9	9.7
SCHWZERG184	881	289889	118827	41.0	365.6	145.0	39.6
SCHWZERSG1	751	40437	6648	16.4	68.6	10.6	15.4
SCHWZERSG2	561	108353	26938	24.9	228.9	50.6	22.1
SEMCO CLINGER	27	781	104	13.6	40.7	4.5	11.1
SKRSKYS55	32	2018	678	33.6	148.0	27.4	18.8
SKRSKYS58	56	3540	1867	52.7	159.3	28.8	18.1
SMITH 600	383	51570	23692	45.9	165.0	68.3	41.4
SNIAS 350	234	62526	16226	26.0	276.0	70.0	25.4

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
STN10	163	1377	243	17.6	31.3	3.5	11.3
STN5	128	1524	327	21.5	43.0	5.4	12.5
STN77	104	1581	324	20.5	44.4	6.9	15.6
STOLAMRC3	212	3897	765	19.6	46.8	7.8	16.7
TCRAFKD	273	2009	1181	58.8	16.6	5.2	31.5
TCRAFTA	29	238	55	23.0	25.4	3.8	14.8
TCRAFT8C	1814	40127	6370	15.9	45.9	6.1	13.3
TCRAFTBL	223	3731	622	16.7	54.2	5.5	10.1
THUNDRAX7	49	1330	194	14.6	31.9	4.2	13.2
TMPSONNAVION	643	85695	33002	38.5	166.7	61.6	36.9
TRYTEK65	347	4201	879	20.9	34.2	4.1	11.9
UNIVACGC1	655	27734	10416	37.6	57.7	19.1	33.0
UNIVAR108	1991	62799	6155	9.8	54.2	4.6	8.4
UNIVAR415	2375	76818	18882	24.6	45.1	10.0	22.1
VARGA 2150	131	7801	1062	13.6	64.6	8.5	13.1
WACO ASO	30	286	104	36.2	32.2	7.6	23.5
WACO UPF7	163	4971	1808	36.4	64.3	18.3	28.4
WACO YK	56	373	144	38.8	31.4	10.1	32.2
TOTAL	260505	35249171	712026	2.0	164.0	3.2	1.96

TABLE 2 - 6

GENERAL AVIATION ACTIVE AIRCRAFT
BY
TYPE OF AIRCRAFT
1983

PAGE 1 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	84221	59199	976	1.6	70.3	1.2
1 ENG: 4+ SEATS	119549	107228	778	0.7	89.7	0.7
1 ENGINE: TOTAL	203770	166427	1248	0.8	81.7	0.6
2 ENG: 1-6 SEATS	18691	16249	315	1.9	86.9	1.7
2 ENG: 7+ SEATS	10130	8660	150	1.7	85.5	1.5
2 ENGINE: TOTAL	28821	24910	349	1.4	86.4	1.2
PISTON: OTHER	327	143	14	10.0	43.8	4.4
PISTON: TOTAL	232918	191480	1296	0.7	82.2	0.6
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4868	4733	72	1.5	97.2	1.5
2 ENG: 13+ SEATS	669	578	48	8.3	86.4	7.2
2 ENGINE: TOTAL	5537	5311	87	1.6	95.9	1.6
TURBOPROP: OTHER	204	142	38	26.7	69.6	18.5
TURBOPROP: TOTAL	5741	5453	95	1.7	95.0	1.6

TABLE 2 - 6

GENERAL AVIATION ACTIVE AIRCRAFT
BY
TYPE OF AIRCRAFT
1983

PAGE 2 OF 2

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3655	3447	92	2.7	94.3	2.5
TURBOJET: OTHER	720	451	91	20.2	62.7	12.7
TURBOJET: TOTAL	4375	3898	130	3.3	89.1	3.0
FIXED WING: TOTAL	243034	200831	1306	0.7	82.6	0.5
ROTORCRAFT						
PISTON	5413	2541	191	7.5	47.0	3.5
TURBINE	4582	3998	153	3.8	87.3	3.3
ROTORCRAFT: TOTAL	9995	6540	245	3.7	65.4	2.5
OTHER	7476	5923	207	3.5	79.2	2.8
TOTAL	260505	213293	1345	0.6	81.9	0.5

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT
BY
STATE OF BASED AIRCRAFT
1983

PAGE 1 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	2987	438	2594	416	86.9	18.9
ALASKA	7588	670	6075	598	80.1	10.6
ARIZONA	6381	639	4737	562	74.2	11.5
ARKANSAS	3088	460	2977	459	96.4	20.7
CALIFORNIA	34829	1406	29236	1321	83.9	5.1
COLORADO	5441	588	4407	532	81.0	13.1
CONNECTICUT	1893	348	1426	311	75.3	21.5
DELAWARE	868	243	809	237	93.2	37.8
DC	60	47	58	47	96.3	108.3
FLORIDA	14745	950	12688	896	86.0	8.2
GEORGIA	5649	608	4955	578	87.7	13.9
HAWAII	584	187	381	152	65.3	33.4
IDAH0	2670	418	2146	378	80.4	18.9
ILLINOIS	9401	774	7700	706	81.9	10.1
INDIANA	4732	552	4207	530	88.9	15.3
IOWA	3872	508	3165	469	81.7	16.2
KANSAS	5050	580	4519	555	89.5	15.1
KENTUCKY	2107	370	1752	338	83.1	21.7
LOUISIANA	4491	550	3972	520	88.4	15.9
MAINE	1413	301	1263	288	89.4	27.9
MARYLAND	3507	489	3116	467	88.9	18.2

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT
BY
STATE OF BASED AIRCRAFT
1983

PAGE 2 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MASSACHUSETTS	3337	475	2737	432	82.0	17.4
MICHIGAN	8714	743	7079	677	81.2	10.4
MINNESOTA	5738	611	4733	563	82.5	13.2
MISSISSIPPI	2918	453	2706	441	92.7	20.9
MISSOURI	4749	555	3858	507	81.2	14.3
MONTANA	3033	455	2538	418	83.7	18.7
NEBRASKA	1309	300	1178	290	89.9	30.3
NEVADA	2699	425	2288	398	84.8	19.9
NEW HAMPSHIRE	1654	326	1430	313	86.5	25.5
NEW JERSEY	4605	555	4021	525	87.3	15.5
NEW MEXICO	2892	435	2387	396	82.5	18.5
NEW YORK	7866	705	6045	626	76.8	10.5
NORTH CAROLINA	5012	572	4344	537	86.7	14.6
NORTH DAKOTA	1888	354	1734	341	91.8	24.9
OHIO	8943	747	7478	693	83.6	10.4
OKLAHOMA	6325	657	5634	626	89.1	13.5
OREGON	5735	604	4689	552	81.8	12.9
PENNSYLVANIA	7564	699	6174	643	81.6	11.4
RHODE ISLAND	568	204	510	197	89.8	47.4
SOUTH CAROLINA	1869	351	1686	337	90.2	24.8

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	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
125	1360	306	78.4	23.6
159	2935	431	88.1	17.7
180	20414	1117	85.8	6.4
191	1440	311	88.6	26.2
201	560	218	92.4	42.2
230	2554	419	77.8	16.9
239	5645	605	74.8	10.5
241	1229	286	85.2	26.9
242	3782	495	74.2	12.8
243	1192	285	87.3	28.4
244	362	161	87.3	52.8
245	183	115	91.9	80.1
246	938	226	88.7	29.1
247	213293	1345	81.9	0.5

000000 EST. OF POPULATION PROCEDURES

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GENERAL AVIATION ACTIVE AIRCRAFT
BY
REGION OF BASED AIRCRAFT
1983

REGION	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALASKAN	7588	670	6075	598	80.1	10.6
CENTRAL	14981	975	12720	915	84.9	8.2
EASTERN	29193	1316	24006	1219	82.2	5.6
EUROPEAN OFFICE	543	157	508	153	93.5	39.1
GREAT LAKES	46249	1580	38072	1472	82.3	4.2
NEW ENGLAND	9578	786	8025	733	83.8	10.3
NORTHWEST MT.	27432	1271	22064	1160	80.4	5.6
SOUTHERN	39431	1482	34356	1412	87.1	4.9
SOUTHWESTERN	40703	1517	35478	1438	87.2	4.8
WESTERN-PACIFIC	44695	1555	36820	1454	82.4	4.3
TOTAL	260505		213293	1345	81.9	0.5

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

PAGE 1 OF 4

AIRCRAFT TYPE	ACTIVE USE												
TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PERSO- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIV	
FIXED WING													
FIXED WING - PISTON													
1 ENG: 1-3 SEATS													
EST. NO. ACT.	59199	108	3336	35850	8223	5814	1605	0	111	1369	1728	25022	
% STD. ERROR	A	D	B	A	A	B	B	A	D	C	B		
EST. % ACT.	70.3												
1 ENG: 4+ SEATS													
EST. NO. ACT.	107228	3044	29838	58047	5438	98	1516	371	2152	1301	5105	12321	
% STD. ERROR	A	B	A	A	B	D	C	D	B	C	B		
EST. % ACT.	89.7												
1 ENGINE: TOTAL													
EST. NO. ACT.	166427	3152	33173	93698	13662	5912	3120	1625	2263	2671	8833	37343	
% STD. ERROR	A	B	A	A	A	A	B	B	B	B	A		
EST. % ACT.	81.7												
2 ENG: 1-6 SEATS													
EST. NO. ACT.	18249	2263	8122	2636	534	124	178	1	1337	408	390	2442	
% STD. ERROR	A	B	A	B	D	D	D	D	B	D	D		
EST. % ACT.	86.9												

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %	10 %		A
10 %	20 %		B
20 %	30 %		C
30 %			D

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

PAGE 3 OF 4

AIRCRAFT TYPE		ACTIVE USE											
TOTAL ACTIVE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIVE	
2 ENGINE: TOTAL													
EST NO. ACT.	3304	775	60	0	0	0	38	281	547	269	37	226	
% STD. ERROR	A	C	D	A	A	A	D	C	C	D	D		
EST. % ACT.	95.9												
TURBOPROP: OTHER													
EST NO. ACT.	4	0	1	0	116	4	0	5	3	9	0	62	
% STD. ERROR	D	A	D	A	B	D	A	D	D	D	A		
EST. % ACT.	69.6												
TURBOPROP: TOTAL													
EST NO. ACT.	3308	775	62	0	116	4	38	286	551	279	37	288	
% STD. ERROR	A	C	D	A	B	D	D	C	C	D	D		
EST. % ACT.	95.0												
FIXED WING - TURBOJET													
2 ENGINE TURBOJET													
EST NO. ACT.	3116	156	25	0	0	25	0	0	45	78	0	208	
% STD. ERROR	A	D	D	A	A	D	A	A	D	D	A		
EST. % ACT.	94.3												
TURBOJET: OTHER													
EST NO. ACT.	309	61	50	0	0	0	0	0	0	31	0	289	
% STD. ERROR	B	D	D	A	A	A	A	A	A	D	A		
EST. % ACT.	62.7												
TURBOJET: TOTAL													
EST NO. ACT.	3425	217	75	0	0	25	0	0	45	110	0	477	
% STD. ERROR	A	D	D	A	A	D	A	A	D	D	A		
EST. % ACT.	89.1												

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE	ACTIVE USE												
	TOTAL ACTIVE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIVE
FIXED WING: TOTAL													
	EST. NO. ACT.	15285	44573	96682	14396	8336	3442	1697	1461	5710	3842	7408	42203
	% STD. ERROR EST. % ACT.	A 82.6	A	A	A	A	B	B	B	A	B	A	
ROTORCRAFT PISTON													
	EST. NO. ACT.	35	179	539	354	675	391	150	2	32	176	8	2872
	% STD. ERROR EST. % ACT.	D 47.0	D	C	C	B	C	D	D	D	D	D	
TURBINE													
	EST. NO. ACT.	1677	203	22	127	40	72	369	17	1105	367	0	582
	% STD. ERROR EST. % ACT.	B 87.3	D	D	D	C	D	D	D	B	D	A	
ROTORCRAFT: TOTAL													
	EST. NO. ACT.	1711	383	562	481	715	463	519	18	1137	543	8	3453
	% STD. ERROR EST. % ACT.	B 85.4	C	C	C	B	C	C	D	B	C	D	
OTHER													
	EST. NO. ACT.	68	69	4240	572	0	118	177	0	11	408	261	1553
	% STD. ERROR EST. % ACT.	D 79.2	D	A	C	A	D	D	A	D	C	D	
TOTAL													
	EST. NO. ACT.	17064	45025	101484	15450	7051	4023	2392	1479	6857	4791	7674	47086
	% STD. ERROR EST. % ACT.	A 81.9	A	A	A	A	B	B	B	A	B	A	A

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED
1983

PAGE 1 OF 2

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	2964	B	5.0	2899	B	97.8
1 ENG: 4+ SEATS	50552	A	47.1	50412	A	99.7
1 ENGINE: TOTAL	53516	A	32.2	53311	A	99.6
2 ENG: 1-6 SEATS	14709	A	90.5	14709	A	100.0
2 ENG: 7+ SEATS	8504	A	98.2	8463	A	99.5
2 ENGINE: TOTAL	23213	A	93.2	23213	A	100.0
PISTON: OTHER	128	C	89.0	114	C	89.5
PISTON: TOTAL	76857	A	40.1	76651	A	99.7
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4733	A	100.0	4733	A	100.0
2 ENG: 13+ SEATS	578	A	100.0	578	A	100.0
2 ENGINE: TOTAL	5311	A	100.0	5311	A	100.0
TURBOPROP: OTHER	24	D	17.1	24	D	100.0
TURBOPROP: TOTAL	5336	A	97.8	5336	A	100.0

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*****
*          STANDARD ERROR          CODE          *
*          -----          *
*          GREATER          LESS THAN          *
*          THAN          OR          *
*          -----          EQUAL TO          *
*          0 %          10 %          A          *
*          *          *          *          *
*          10 %          20 %          B          *
*          *          *          *          *
*          20 %          30 %          C          *
*          *          *          *          *
*          30 %          *          D          *
*          *          *          *          *
*****

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TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED
1983

PAGE 2 OF 2

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING - TURBOJET 2 ENGINE TURBOJET	3447	A	100.0	3447	A	100.0
TURBOJET: OTHER	451	A	100.0	451	A	100.0
TURBOJET: TOTAL	3898	A	100.0	3898	A	100.0
FIXED WING: TOTAL	86090	A	42.9	86090	A	100.0
ROTORCRAFT PISTON	15	D	0.6	10	D	67.0
TURBINE	286	D	7.2	286	D	100.0
ROTORCRAFT: TOTAL	301	D	4.6	301	D	100.0
OTHER	41	D	0.7	18	D	43.1
TOTAL	86432	A	40.5	86432	A	100.0

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 1 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
OTHER 01	13748	6889	462	6.7	50.1	3.4
OTHER 02	3292	2358	250	10.6	71.6	7.6
OTHER 03	1190	398	167	41.9	33.4	14.0
OTHER 04	658	435	104	23.9	66.1	15.8
OTHER 05	76	40	9	21.2	52.9	11.2
OTHER 06	1047	921	85	9.2	87.9	8.1
OTHER 07	449	342	58	17.0	76.2	13.0
OTHER 08	133	44	30	69.0	33.0	22.8
OTHER 09	1547	1307	104	7.9	84.5	6.7
OTHER 10	490	246	115	46.6	50.3	23.4
OTHER 11	1904	422	122	29.0	22.2	6.4
OTHER 12	1180	838	133	15.8	71.0	11.2
OTHER 13	3606	2658	179	6.7	73.7	5.0
AERORSJ2	33	9	2	22.3	28.3	6.3
AGUSTAA109	42	32	3	11.0	75.6	8.3
AIRPTSA	235	140	26	18.5	59.8	11.1
AIRSPC18	22	9	2	23.0	41.7	9.6
AIRTRCAT300	362	362	0	0.0	100.0	0.0
AMD FALC10	136	136	0	0.0	100.0	0.0
AMD FALC20	201	201	0	0.0	100.0	0.0
AMD FALC50	88	88	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 2 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AMTR TMK	27	2	1	62.8	8.3	5.2
ARCTICS1A	91	37	4	9.9	40.1	4.0
ARCTICS1B1	23	10	2	24.2	44.2	10.7
ARONCA15	201	104	50	47.7	51.8	24.7
ARONCA58	149	61	27	45.1	40.9	18.4
ARONCA65	138	76	14	17.9	55.0	9.8
ARONCAC3	59	13	2	11.5	22.7	2.6
AVIANWFALCON	26	21	1	6.2	79.0	4.9
AYRES S2	814	600	109	18.2	73.7	13.4
AYRES S2T	58	58	0	0.0	100.0	0.0
BAG B206	32	24	4	15.4	75.1	11.6
BALWKSFIREFY	1095	1025	59	5.7	93.6	5.4
BEECH 17	188	93	7	7.7	49.4	3.8
BEECH 18	885	450	22	4.9	50.8	2.5
BEECH 200	815	815	0	0.0	100.0	0.0
BEECH 23	2826	2709	80	3.0	95.9	2.8
BEECH 33	1668	1595	61	3.8	95.6	3.7
BEECH 35	6849	6289	175	2.8	91.8	2.6
BEECH 36	1940	1936	16	0.8	99.8	0.8
BEECH 45	286	122	55	45.2	42.6	19.3
BEECH 50	337	190	63	33.0	56.5	18.7

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 55	2246	2154	66	3.1	95.9	2.9
BEECH 58	1427	1422	15	1.1	99.7	1.1
BEECH 60	429	425	11	2.6	99.2	2.6
BEECH 65	137	116	10	8.4	84.7	7.1
BEECH 77	238	232	20	8.6	97.6	8.4
BEECH 80	187	127	9	7.2	67.7	4.9
BEECH 90	1070	1070	0	0.0	100.0	0.0
BEECH 95	460	460	0	0.0	100.0	0.0
BELL 204	159	110	8	7.6	69.0	5.3
BELL 206	2177	2097	58	2.8	96.3	2.7
BELL 222	54	51	3	5.5	94.8	5.2
BELL 47	1417	694	105	15.1	49.0	7.4
BLANCA11	891	342	118	34.4	38.4	13.2
BLANCA1413	264	118	13	10.8	44.7	4.6
BLANCA1419	273	195	15	7.5	71.5	5.3
BLANCA17	1052	870	101	11.6	82.7	9.6
BLANCA7	5801	3953	146	3.7	68.1	2.5
BLANCA8	704	566	78	13.8	80.4	11.1
BNORM BN2	120	120	0	0.0	100.0	0.0
BNORM BN2MK3	11	11	0	0.0	100.0	0.0
BOEING75	1911	963	175	18.2	50.4	9.2

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BOEINGC97	18	7	1	11.6	38.6	4.5
BUKER 131	32	11	4	33.2	35.5	11.8
CAMRONMODELO	152	97	18	18.2	63.5	11.6
CESSNA120	869	617	45	7.3	71.0	5.2
CESSNA140	2327	1540	199	12.9	66.2	8.6
CESSNA150	19623	17831	339	1.9	90.9	1.7
CESSNA170	2436	2056	112	5.5	84.4	4.6
CESSNA172	24908	23098	349	1.5	92.7	1.4
CESSNA175	1301	975	76	7.8	74.9	5.8
CESSNA177	2903	2828	74	2.6	97.4	2.5
CESSNA180	2673	2019	173	8.6	75.5	6.5
CESSNA182	13769	12829	245	1.9	93.2	1.8
CESSNA185	1592	1589	16	1.0	99.8	1.0
CESSNA188	1859	1625	125	7.7	87.4	6.7
CESSNA205	246	246	0	0.0	100.0	0.0
CESSNA206	3011	2874	103	3.6	95.4	3.4
CESSNA207	391	279	56	19.9	71.4	14.2
CESSNA210	6174	5929	130	2.2	96.0	2.1
CESSNA305	273	273	0	0.0	100.0	0.0
CESSNA310	3224	2707	139	5.1	84.0	4.3
CESSNA320	329	318	27	8.6	96.8	8.3

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA335	50	50	0	0.0	100.0	0.0
CESSNA337	1247	1140	58	5.1	91.4	4.7
CESSNA340	951	918	44	4.8	96.5	4.6
CESSNA401	243	238	15	6.3	98.1	6.2
CESSNA402	742	732	21	2.9	98.7	2.8
CESSNA411	169	121	16	13.4	71.7	9.6
CESSNA414	779	779	0	0.0	100.0	0.0
CESSNA421	1321	1253	58	4.6	94.8	4.4
CESSNA425	130	129	3	2.3	98.9	2.3
CESSNA441	231	231	0	0.0	100.0	0.0
CESSNA500	537	511	32	6.3	95.2	6.0
CESSNA50	69	18	6	34.8	25.9	9.0
COMWTH185	106	33	4	11.4	30.8	3.5
CONAERLA4	467	422	40	9.6	90.3	8.7
CURTISC46	45	30	6	19.5	67.1	13.1
CURTISTRVAIR	189	37	4	10.9	19.6	2.1
CVAC 240	37	6	2	34.4	17.1	5.9
CVAC 340	20	7	3	46.7	37.2	17.4
CVAC BT13	97	30	2	8.2	30.4	2.5
CVAC P4Y	8	6	0	0.0	77.8	0.0
DHAV DHC1	84	59	4	7.0	70.0	4.9

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 8 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
DHAV DHC2	291	178	18	10.4	61.1	6.3
DHAV DHC3	21	16	4	26.4	75.0	19.8
DHAV DHC6	88	81	12	14.3	91.8	13.1
DHAVXXDH82	79	51	5	9.7	64.4	6.3
DOUG A2B	26	11	2	20.0	43.8	8.7
DOUG DC3	377	178	30	16.7	47.3	7.9
DOUG DC4	79	17	7	39.9	21.1	8.4
DOUG DC6	85	33	11	32.0	39.0	12.5
DOUG DC7	37	26	4	13.5	70.7	9.6
EAGLE DW	72	62	12	20.1	85.5	17.1
EIRVON20	112	97	4	4.0	86.4	3.4
EMAIR MA1	22	19	3	15.2	88.4	13.5
ENSTRMF28	319	278	43	15.3	87.0	13.3
FLEET 16B	25	9	1	15.6	36.0	5.6
FOMOCO4AT	6	0	0	0.0	0.0	0.0
FRCHLD24	288	88	9	9.9	30.4	3.0
FRCHLDC119	34	17	4	23.3	49.6	11.6
FRCHLDM62	222	96	6	6.1	43.4	2.6
GLASFLH301	114	84	6	7.0	73.9	5.2
GRUMAVAA1	578	400	128	32.1	69.2	22.2
GRUMAVAA5	326	246	77	31.4	75.5	23.7

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 7 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
GRUMAVG164	656	656	0	0.0	100.0	0.0
GRUMAVTBM	34	10	4	34.6	30.9	10.7
GULSTM112	704	630	57	9.1	89.4	8.2
GULSTM500	330	310	29	9.2	94.0	8.7
GULSTM680	328	217	28	12.8	66.0	8.4
GULSTM680TP	123	123	0	0.0	100.0	0.0
GULSTM690TP	476	476	0	0.0	100.0	0.0
GULSTMAA1	601	441	99	22.3	73.4	16.4
GULSTMAA5	1372	1239	84	6.8	90.3	6.1
GULSTMG1159	178	178	0	0.0	100.0	0.0
GULSTMG159	132	132	0	0.0	100.0	0.0
HELIO H391	24	10	2	16.4	40.8	6.7
HILLERFH1100	76	20	11	54.0	26.7	14.4
HILLERUH12	620	423	31	7.2	68.3	4.9
HUGHES269	732	534	36	6.7	72.9	4.9
HUGHES369	645	582	91	15.6	90.3	14.1
HWKSLYDH104	33	0	0	0.0	0.0	0.0
HWKSLYDH114	7	1	0	0.0	18.2	0.0
HWKSLYDH125	189	189	0	0.0	100.0	0.0
INTRCP200	30	28	1	4.2	93.0	3.9
ISRAEL1124	176	176	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 8 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
JBMSTRDGA15	82	19	4	20.4	22.7	4.6
LAIKFN10	36	6	1	24.3	17.1	4.2
LEAR 35	354	354	0	0.0	100.0	0.0
LKHEED1329	95	76	14	19.0	79.5	15.1
LKHEED18	68	17	8	48.5	25.0	12.1
LKHEEDT33	47	2	1	66.7	4.7	3.1
LUSCOM8	2144	1299	135	10.4	60.6	6.3
MARTIN404	22	0	0	0.0	0.0	0.0
MAULE M5	421	342	37	10.8	81.2	8.8
MCLISHFUNKB	139	63	6	10.2	45.5	4.7
MNCUP90	68	19	5	24.7	28.6	7.1
MNMITEM18	150	72	16	22.5	47.9	10.8
MOONEYM20	5923	5475	165	3.0	92.4	2.8
MTSBSIMU2	365	352	26	7.3	96.5	7.0
MULTECD16	46	32	5	8.3	69.2	5.8
NAMER F51	136	53	14	27.2	38.9	10.6
NAMER NA230	56	40	5	11.8	70.5	8.3
NAMER T6	517	409	25	6.2	79.1	4.9
NAVIONNAVION	575	353	88	24.8	61.5	15.3
NORD SV4	44	29	3	9.1	65.7	5.9
NORVST65	58	22	2	8.1	38.8	3.1

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP

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1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ORLHELH19	75	13	11	85.7	16.7	14.3
PICARDAX6	153	125	8	6.3	81.6	5.1
PIPER 600	388	388	0	0.0	100.0	0.0
PIPER J2	53	14	2	12.1	26.0	3.1
PIPER J3	4093	2458	236	9.6	60.0	5.8
PIPER J4	239	63	16	26.0	26.3	6.8
PIPER J5	339	80	80	100.3	23.6	23.6
PIPER PA12	1312	829	147	17.8	63.2	11.2
PIPER PA15	185	88	19	21.7	47.7	10.3
PIPER PA16	355	232	42	18.0	65.2	11.7
PIPER PA17	110	69	5	7.3	63.0	4.6
PIPER PA18	3491	2617	199	7.6	75.0	5.7
PIPER PA20	447	323	27	8.3	72.4	6.0
PIPER PA22	4829	3201	278	8.7	66.3	5.8
PIPER PA23	3501	2924	156	5.3	83.5	4.5
PIPER PA24	3180	2953	118	4.0	92.9	3.7
PIPER PA25	1329	964	138	14.3	72.5	10.4
PIPER PA28	22239	21142	274	1.3	95.1	1.2
PIPER PA30	1276	1057	98	9.2	82.8	7.6
PIPER PA31	2125	1967	80	4.1	92.5	3.8
PIPER PA31T	587	567	24	4.2	96.6	4.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP

PAGE 10 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER PA32	4098	3986	88	2.2	97.3	2.1
PIPER PA34	2206	2206	0	0.0	100.0	0.0
PIPER PA38	411	408	13	3.2	99.2	3.2
PIPER PA38	1578	1499	74	5.0	95.0	4.7
PIPER PA44	346	302	50	16.5	87.4	14.4
PROPTJ200	65	52	3	6.3	79.8	5.0
RAVEN S50	87	37	6	15.0	43.0	6.5
RAVEN S55	707	624	30	4.8	88.2	4.2
RKWE1700	22	19	2	11.0	86.8	9.6
RKWE1NA265	337	337	0	0.0	100.0	0.0
ROBSINR22	218	169	9	5.3	77.6	4.1
RYAN ST3	161	71	18	26.2	43.8	11.5
RYAN STA	34	11	2	16.6	31.7	5.3
SCHWZERG164	881	793	83	10.4	90.0	9.4
SCHWZERSG1	751	590	33	5.6	78.5	4.4
SCHWZERSG2	561	473	54	11.4	84.4	9.6
SEWCO CLINGER	27	19	1	7.9	69.3	5.5
SKRSKYS55	32	14	4	27.8	43.2	12.0
SKRSKYS58	56	22	11	49.6	39.7	19.7
SMITH 600	383	312	62	20.0	81.6	16.3
SNIAS 350	234	227	12	5.5	96.8	5.3

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

PAGE 11 OF 11

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
STN10	163	44	6	13.5	27.0	3.6
STN15	128	35	6	17.5	27.7	4.8
STN17	104	36	5	13.3	34.2	4.5
ST13	212	83	9	10.4	39.3	4.1
TC10	273	121	60	49.6	44.3	22.0
TC15	29	9	2	17.6	32.3	5.7
TC18	1814	875	76	8.7	48.2	4.2
TC19	223	69	9	13.2	30.9	4.1
TH17	49	42	3	6.3	85.2	5.4
TM10	643	514	56	10.9	79.9	8.7
TR16	347	123	21	17.2	35.4	6.1
UN11	655	480	86	17.9	73.3	13.1
UN18	1991	1159	58	5.0	58.2	2.9
UN15	2375	1703	182	10.7	71.7	7.7
V150	131	121	4	3.7	92.1	3.4
W10	30	9	2	27.6	29.6	8.2
W17	163	77	18	22.7	47.4	10.8
W18	58	12	3	21.8	21.2	4.6
TOTAL	260505	213293	1345	0.6	81.9	0.5

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

PAGE 1 OF 6

AIRCRAFT TYPE	IMC DAY			IMC NIGHT			TOTALS		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	STD ERROR
<u>FIXED WING</u>									
PISTON - 1 ENGINE									
1-3 SEATS	2847	461	68773	1508	346	24035	3024	474	28094
4+ SEATS	43638	1398	1256362	24842	1211	390256	44274	1400	1647345
TOTAL 1 ENGINE	46485	1472	1325635	26350	1260	414291	47298	1479	1740156
PISTON - 2 ENGINES									
1-6 SEATS	11748	446	568730	9890	485	361215	12149	432	931790
7+ SEATS	7169	252	564738	6667	284	334434	7282	243	905229
TOTAL 2 ENGINE	18917	512	1133468	16557	562	695649	19430	495	1837020
OTHER PISTON	69	10	6484	53	10	4465	69	10	10948
TOTAL PISTON	65470	1558	2465587	42960	1379	1114405	66797	1559	3588124
TURBOPROPS - 2 ENGINES									
1-12 SEATS	4542	96	359537	4336	132	152421	4542	96	514089
13+ SEATS	551	27	175318	551	27	73614	551	27	248932
TOTAL 2 ENGINE	5093	100	534856	4887	135	226035	5093	100	763021
OTHER TURBOPRP	39	16	978	15	13	14	39	16	1092
TOTAL TURBOPRP	5132	101	535834	4902	135	226149	5132	101	764113

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

PAGE 2 OF 6

AIRCRAFT TYPE	IMC DAY			IMC NIGHT			TOTALS		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
<u>FIXED WING - CONTINUED</u>									
<u>TURBOJET</u>									
2 ENGINE	3395	49	344009	46022	3304	81	173655	3395	49
OTHER TURBOJET	451	0	19069	8319	410	42	11417	451	0
TOTAL TURBOJET	3847	49	363078	46768	3714	91	185072	3847	49
ALL FIXED WING	74448	1562	3364499	180312	51576	1389	1525627	75776	1563
<u>ROTORCRAFT</u>									
PISTON	7	3	156	84	0	0	0	7	3
TURBINE	249	99	6967	2613	91	27	4206	256	99
TOTAL ROTOR	256	99	7123	2614	91	27	4206	263	99
OTHER AIRCRAFT	102	69	2738	1874	0	0	0	102	69
TOTALS	74806	1567	3352432	180340	51666	1389	1519891	76141	1568

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

PAGE 3 OF 6

AIRCRAFT TYPE	VMC DAY			VMC NIGHT			TOTALS		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
<u>FIXED WING</u>									
PISTON - 1 ENGINE									
1-3 SEATS	58543	217	7336152	19633	980	552763	58990	123	7885496
4+ SEATS	106331	260	11919976	68224	1367	1376667	106780	181	13296067
TOTAL 1 ENGINE	164874	339	19256128	87856	1682	1929430	165770	219	21181563
PISTON - 2 ENGINES									
1-6 SEATS	15899	146	1845675	12120	435	462867	16054	106	2308240
7+ SEATS	8510	79	1562053	7246	247	477167	8635	8	2048488
TOTAL 2 ENGINE	24410	166	3407728	19366	500	940034	24688	106	4356728
OTHER PISTON	139	4	26730	81	11	7916	143	0	34630
TOTAL PISTON	189422	377	22690586	107303	1755	2877380	190602	243	25572920
TURBOPROPS - 2 ENGINES									
1-12 SEATS	4462	112	744945	3895	184	199614	4462	112	947336
13+ SEATS	532	35	312084	436	55	68893	532	35	384468
TOTAL 2 ENGINE	4995	117	1057029	4331	192	268507	4995	117	1331804
OTHER TURBOPRP	142	0	42117	73	20	1077	142	0	43109
TOTAL TURBOPRP	5137	117	1099147	4404	193	269585	5137	117	1374913

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

PAGE 4 OF 6

AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	VMC DAY			VMC NIGHT			TOTALS					
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	
FIXED WING - CONTINUED													
TURBOJETS													
2 ENGINE	3049	130	648649	67021	2775	161	174696	24623	3049	130	823175	81736	
OTHER TURBOJET	427	32	63668	13538	388	51	18347	7076	427	32	82013	17027	
TOTAL TURBOJET	3476	134	712314	68374	3163	169	193043	25620	3476	134	905188	83491	
ALL FIXED WING	198035	417	24502047	584954	114870	1773	3340008	146787	199215	301	27853022	647658	
ROTORCRAFT													
PISTON	2522	13	533590	43269	1060	136	71191	14436	2537	3	599150	48333	
TURBINE	3951	53	1567902	132183	2078	240	156093	42473	3998	0	1727431	139983	
TOTAL ROTOR	6473	55	2101492	139085	3138	276	227283	44859	6535	3	2326581	148093	
OTHER AIRCRAFT	5777	83	402738	46904	197	93	1975	1289	5872	52	404685	45955	
TOTALS	210285	429	26830778	603089	118205	1797	3546071	153494	211622	306	30369347	666031	

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	DAY - TOTAL				NIGHT - TOTAL			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
<u>FIXED WING</u>								
PISTON - 1 ENGINE								
1-3 SEATS	58640	202	7405444	359257	19960	984	577009	74359
4+ SEATS	106792	187	13176713	430923	69443	1355	1767173	102755
TOTAL 1 ENGINE	165432	276	20582158	561035	89403	1675	2344182	126838
PISTON - 2 ENGINES								
1-6 SEATS	16107	97	2421124	140481	12678	416	823805	113945
7+ SEATS	8585	50	2125895	195009	7540	220	811414	128670
TOTAL 2 ENGINE	24692	109	4547019	240340	20217	471	1635219	171871
OTHER PISTON	143	0	33214	7459	81	11	12380	2600
TOTAL PISTON	190268	296	25162391	610393	109700	1740	3991781	213622
TURBOPROPS - 2 ENGINES								
1-12 SEATS	4733	0	1103655	76294	4451	115	352035	41110
13+ SEATS	578	0	494293	93559	551	27	142468	32085
TOTAL 2 ENGINE	5311	0	1597948	120723	5003	118	494504	52148
OTHER TURBOPRP	142	0	43162	7578	73	20	1230	461
TOTAL TURBOPRP	5453	0	1641109	120960	5076	119	495733	52150

STATION ANNUAL HOURS FLOWN UNDER LOW FLOW CONDITIONS

				NIGHT		TOTAL	
				STANDARD ERROR	NUMBER ACTIVE PERCENT	HOURS FLOWN	STD ERROR
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11
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13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16
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18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31
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34	34	34	34	34	34	34	34
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97	97	97	97	97	97	97	97
98	98	98	98	98	98	98	98
99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100

STATION TOTALS DUE TO ESTIMATION PROCEDURES

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF AIRCRAFT BASE
1983

PAGE 1 OF 3

REGION	IMC DAY				IMC NIGHT				TOTALS			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	837	248	38162	18689	548	189	37159	13204	983	268	75321	32132
CENTRAL	3407	489	170567	37184	2524	422	100229	37779	3535	499	270796	65905
EASTERN	9499	818	451424	62962	6833	694	221811	39984	9602	823	674425	97657
EUROPEAN OFFICE	288	129	33833	17783	285	129	10796	8309	288	129	44629	23380
GREAT LAKES	14045	971	709977	102783	9362	783	303784	60969	14291	980	1013690	157485
NEW ENGLAND	2484	436	124205	37368	1867	375	72459	33512	2486	436	196479	65945
NORTHWEST MT.	5452	607	235866	46311	4075	536	131523	49506	5750	625	368441	76089
SOUTHERN	15895	1016	805330	114228	11495	858	319499	58058	15969	1017	1124819	156038
SOUTHWESTERN	11739	880	366470	38769	8359	725	182194	35735	11844	884	551921	66251
WESTERN-PACIFIC	11707	902	476579	90897	7051	697	188166	50495	11951	911	664742	138091
TOTALS	74808	1567	3352432	180340	51666	1389	1519891	120532	76141	1568	4879824	268537

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF AIRCRAFT BASE
1983

PAGE 2 OF 3

REGION	VMC DAY			VMC NIGHT			TOTALS		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
ALASKA	6001	623	906673	103446	1945	69092	22123	6001	623
CENTRAL	12096	928	1237676	149234	6745	219614	36221	12159	930
EASTERN	23092	1245	3067467	261668	14077	534543	73919	23248	1249
EUROPEAN OFFICE	485	163	57117	16096	149	3447	2280	485	163
GREAT LAKES	37100	1503	4080936	275809	21577	548972	55668	37180	1504
NEW ENGLAND	7091	718	849410	138913	4356	138211	31304	7096	718
NORTHWEST MT.	22165	1210	2630314	218440	10906	236708	27599	22368	1214
SOUTHERN	33287	1436	4773745	330477	20892	643703	56053	33617	1442
SOUTHWESTERN	34111	1462	5137792	383542	18279	673673	108562	34326	1466
WESTERN-PACIFIC	35010	1473	4334432	208581	20688	539395	51629	35242	1477
TOTALS	210285	429	26830778	603089	118205	3546071	153494	211622	306

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NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 14

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

PAGE 1 OF 22

MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
OTHER 01	347	155	19757	13091	6797	81	394343	54943
OTHER 02	1032	246	19476	9871	2358	0	172752	41073
OTHER 03	66	69	8319	8665	398	0	23966	11833
OTHER 04	232	102	11058	5862	435	0	103351	51915
OTHER 05	19	7	2123	1309	40	0	8294	3410
OTHER 06	764	104	77873	23325	921	0	128441	32116
OTHER 07	307	33	242721	102965	276	43	393936	83433
OTHER 08	18	9	298	169	44	0	12916	3192
OTHER 09	1243	58	176569	34188	1136	91	277742	57301
OTHER 10	246	0	8292	9226	240	35	38534	10605
OTHER 11	0	0	0	0	422	0	7213	5342
OTHER 12	38	49	1396	1899	838	0	484976	62729
OTHER 13	92	68	2271	1851	2604	52	169094	26231
AERORSJ2	0	0	0	0	9	0	272	56
AGUSTAA109	12	3	519	150	32	0	3276	704
AIRPTSA	8	10	900	1515	135	10	16037	5326
AIRSPC1b	0	0	0	0	9	0	197	37
AIRIRCAI300	0	0	0	0	362	0	131765	22098
AMJ FALC10	136	0	12449	9273	118	19	22084	6519
AMD FALC20	201	0	29055	16376	201	0	60772	17152
AMD FALC50	88	0	8950	6731	71	17	6855	6319

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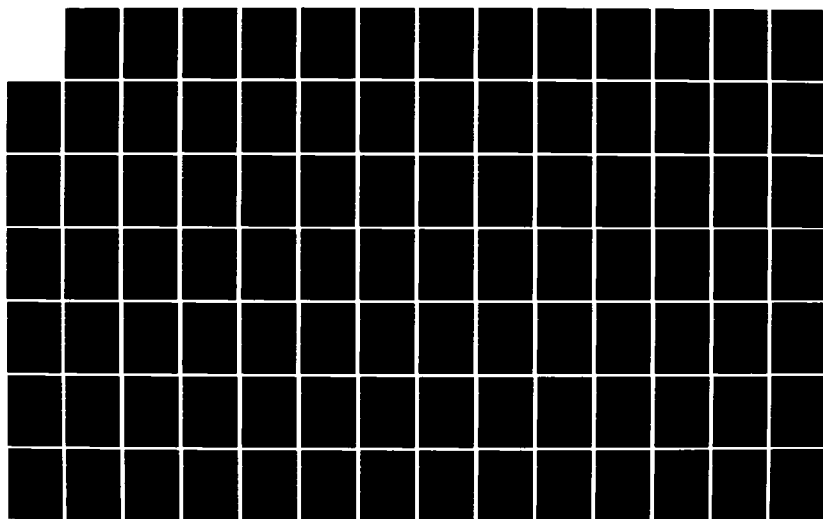
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OCT 84 DOT-TSC-FAA-84-3 FAA-MS-84-5

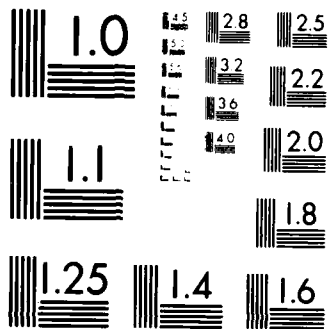
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 2 - 14

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

PAGE 2 OF 22

MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
AMTR TMK	0	0	0	0	2	0	67	27
ARCTICS1A	0	0	0	0	37	0	2166	326
ARCTICS1B1	0	0	0	0	10	0	463	78
ARONCA15	0	0	0	0	104	0	12345	5457
ARONCA58	0	0	0	0	61	0	6411	3018
ARONCA65	0	0	0	0	76	0	2989	417
ARONCAC3	0	0	0	0	13	0	320	36
AVIANMFALCON	0	0	0	0	21	0	679	81
AYRES S2	0	0	0	0	600	0	153180	32695
AYRES S2T	0	0	0	0	58	0	17982	5598
BAG B206	21	3	598	157	24	0	2618	559
BALWKSFIREFY	0	0	0	0	1025	0	34942	5484
BEECH 17	10	3	190	109	91	1	3789	268
BEECH 18	240	19	32341	4798	441	5	115510	10722
BEECH 200	815	0	144709	36382	815	0	206564	36456
BEECH 23	734	192	61788	46949	2709	0	341338	78479
BEECH 33	1156	147	34324	27478	1594	9	211890	41477
BEECH 35	2962	352	114391	50553	6288	10	525822	36928
BEECH 36	1409	179	44874	11459	1936	0	316380	32356
BEECH 45	1	9	25	341	122	0	3163	1575
BEECH 50	0	0	0	0	190	0	17999	2059

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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MANUFACTURER/ MODEL GROUP	IMC			VMC				
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BEECH 55	1993	103	175800	53746	2154	0	272296	34341
BEECH 58	1343	65	94849	14791	1422	0	321163	57296
BEECH 60	425	0	20998	4422	424	7	44398	6209
BEECH 65	77	13	4018	1428	113	5	15439	3064
BEECH 77	0	0	0	0	232	0	57363	5154
BEECH 80	118	5	8801	1349	127	0	20245	2994
BEECH 90	1070	0	107203	17300	1021	45	239834	32462
BEECH 95	228	108	3255	8057	460	0	32414	7781
BELL 204	0	0	0	0	110	0	12025	2121
BELL 206	97	69	3082	6288	2097	0	863651	92829
BELL 222	27	7	738	140	51	0	21744	2765
BELL 47	2	8	63	251	894	0	154644	26286
BLANCA11	0	0	0	0	342	0	19774	7080
BLANCA1413	2	3	10	88	118	0	4980	755
BLANCA1419	38	14	670	124	195	0	11363	3007
BLANCA17	524	145	9982	3838	870	0	69908	15208
BLANCA7	23	20	1391	407	3945	12	403333	35108
BLANCA8	0	0	0	0	568	0	89926	27834
BNORM BN2	0	0	0	0	120	0	29377	28898
BNORM BN2MK3	8	2	2383	1027	11	0	5628	1078
BOEING75	68	72	1373	0	894	72	49075	13430

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
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MANUFACTURER/ MODEL GROUP	IMC			VMC				
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BOEINGC97	6	0	42	7	7	0	243	31
	0	0	0	0	11	0	411	63
	0	0	0	0	97	0	4848	704
CAMRONMODELO	18	14	145	118	610	9	26253	3241
	70	73	546	0	1540	0	75680	12357
	1123	308	37302	20382	17831	0	3935457	315760
CESSNA120	147	77	2882	1175	2056	0	125478	15664
CESSNA140	8088	672	356802	54582	23019	82	3711296	294825
CESSNA150	70	42	885	1456	975	0	62619	8820
CESSNA170	1242	248	59461	30892	2828	0	396943	93527
CESSNA177	371	145	5732	6857	2019	0	249808	71035
CESSNA180	5295	502	161859	31010	12791	55	1311992	111239
CESSNA182	298	157	9557	8633	1589	0	294447	117147
CESSNA185	0	0	0	0	1625	0	311577	44097
CESSNA188	50	43	100	1325	246	0	11218	3545
CESSNA205	995	248	82685	19985	2761	102	494347	110872
CESSNA206	32	35	2202	750	279	0	105899	37790
CESSNA207	4566	305	164427	28190	5762	120	662725	63243
CESSNA210	0	0	0	0	273	0	51235	18703
CESSNA305	1863	168	129112	41830	2571	79	340961	63684
CESSNA310	228	26	7502	1498	302	13	37033	6765
CESSNA320								

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
CESSNA335	50	0	2216	584	50	0	6536	1201
CESSNA337	914	88	30827	8634	1132	18	128959	19564
CESSNA340	918	0	41720	15841	918	0	136955	25634
CESSNA401	238	0	13823	5827	238	0	52198	18881
CESSNA402	724	20	118988	26885	732	0	325923	77496
CESSNA411	110	11	4944	1403	121	0	14504	1704
CESSNA414	721	89	56203	38960	779	0	128192	35610
CESSNA421	1250	15	110787	22027	1249	18	225018	34078
CESSNA425	129	0	11152	4112	122	8	22393	4096
CESSNA441	231	0	32416	23832	231	0	45142	10955
CESSNA500	511	0	84563	18959	511	0	172427	32880
CESSNAT50	0	0	0	0	18	0	299	98
COMETH185	0	0	0	0	33	0	1218	176
CONAERLA4	93	58	4359	7126	422	0	40600	6410
CURTISQU	21	5	2852	1068	30	0	3821	1018
CURTISTRVAIR	2	1	54	0	34	1	2464	293
CVAC 240	5	1	46	43	6	0	364	67
CVAC 340	7	0	689	374	4	2	693	233
CVAC BT13	0	0	0	0	30	0	1233	97
CVAC P4Y	0	0	0	0	6	0	218	0
DHAV DHC1	4	2	190	81	57	1	5662	1341

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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
DHAV DHC2	23	5	1284	921	178	5859
DHAV DHC3	9	4	278	0	16	2985
DHAV DHC6	80	5	38250	20811	81	14956
DHAVXXDH82	0	0	0	0	51	266
DOUG A26	0	0	0	0	11	77
DOUG DC3	51	11	6484	1856	176	5972
DOUG DC4	0	0	0	0	17	77
DOUG DC6	20	8	2318	3913	33	2264
DOUG DC7	11	4	1128	231	26	1028
EAGLE DW	0	0	0	0	62	1761
EIRVON20	0	0	0	0	97	545
EMAIR MA1	0	0	0	0	19	0
ENSTRMF28	0	0	0	0	278	21587
FLEET 16B	0	0	0	0	9	39
FOMOCO4AT	0	0	0	0	0	0
FRCHLD24	0	0	0	0	88	409
FRCHLDC119	17	0	134	10	17	92
FRCHLDW62	0	0	0	0	98	429
GLASFLH301	0	0	0	0	84	609
GRUMAVAA1	195	118	1530	203	400	6879
GRUMAVAA5	140	83	689	55	246	3427

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
GRUMAVG164	0	0	0	0	658	0	92217	12252
GRUMAVTBM	0	0	0	0	10	0	324	78
GULSTM112	252	99	7959	2386	630	0	57131	10488
GULSTM500	284	32	82883	38709	308	8	41911	12933
GULSTM880	148	29	9187	2110	217	0	39589	12781
GULSTM880TP	123	0	4382	1951	123	0	6164	2357
GULSTM890TP	420	48	30511	11569	419	49	81570	18390
GULSTMAA1	10	29	294	85	441	0	30778	12943
GULSTMAA5	558	149	12311	5197	1239	0	119035	22852
GULSTMG1159	178	0	46681	18201	133	34	41543	12408
GULSTMG159	131	3	20085	3959	132	0	37752	6392
HELIO H391	0	0	0	0	10	0	348	65
HILLERFH1100	0	0	0	0	20	0	1346	245
HILLERUH12	0	0	0	0	423	0	136172	17692
HUGHES269	0	0	0	0	534	0	162573	23236
HUGHES369	0	0	0	0	582	0	287756	141069
HMKSLYDH104	0	0	0	0	0	0	0	0
HMKSLYDH114	1	0	211	0	1	0	1895	0
HMKSLYDH125	189	0	32948	14238	108	40	27056	9880
INTRCP200	4	2	147	47	28	0	1552	144
ISRAEL1124	176	0	14780	5236	178	0	33111	3949

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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
JBMSTRDGA15	1	1	0	19	0	605
	0	0	0	6	0	280
LEAR 35	354	0	78267	327	26902	76843
LKHEED1329	76	0	4941	76	889	17372
LKHEED18	0	0	0	17	0	622
LKHEEDT33	2	0	11	0	0	0
LUSCOM8	0	0	0	1299	0	83949
MARTIN404	0	0	0	0	0	0
MAULE M5	44	33	1267	342	251	24590
MCLISHFUNKB	0	0	0	63	0	2539
MNCUP90	0	0	0	19	0	742
MNMITEM18	0	0	0	72	0	1782
MOONEYM20	3090	326	71552	5475	12617	530008
MTSBSIMJ2	352	0	23290	266	10226	46833
MULTECD16	8	2	78	32	14	2244
NAMER F51	4	3	26	53	84	2771
NAMER NA260	5	3	44	40	4	1788
NAMER T6	49	16	555	406	301	22909
NAVIONNAVION	68	57	226	353	0	17212
NORD SV4	0	0	0	29	0	1031
NORVST65	0	0	0	22	0	952

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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ORLHELH19	0	0	0	0	13	0	2757	587
PICARDAX8	0	0	0	0	125	0	6664	2943
PIPER 600	388	0	25320	5877	388	0	66390	13729
PIPER J2	0	0	0	0	14	0	384	53
PIPER J3	0	0	0	0	2458	0	107013	20809
PIPER J4	0	0	0	0	63	0	2138	510
PIPER J5	0	0	0	0	80	0	3084	716
PIPER PA12	0	0	0	0	829	0	53677	19882
PIPER PA15	0	0	0	0	88	0	3215	1042
PIPER PA16	0	0	0	0	232	0	6923	1562
PIPER PA17	0	0	0	0	69	0	2390	184
PIPER PA18	0	0	0	0	2617	0	430891	80189
PIPER PA20	8	9	98	81	323	0	21715	3785
PIPER PA22	2	11	6	0	3201	0	279403	117682
PIPER PA23	1791	200	189385	49661	2883	48	430604	52922
PIPER PA24	1298	255	31615	7114	2953	0	256614	34582
PIPER PA25	0	0	0	0	984	0	188439	30581
PIPER PA28	8237	638	298371	42038	21077	75	2575694	210541
PIPER PA30	599	127	25990	6476	1057	0	126738	19892
PIPER PA31	1636	124	322122	119998	1965	11	508975	96639
PIPER PA31T	547	24	62900	21493	507	40	111919	21524

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GENERAL AVIATION ANNUAL HOURS FLOWN
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MANUFACTURER/ MODEL GROUP	IMC				VMC			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
PIPER PA32	2536	280	136595	36415	3986	0	646528	111796
PIPER PA34	1805	152	156464	31463	2206	0	439354	68155
PIPER PA36	0	0	0	0	408	0	68158	20091
PIPER PA38	249	131	5858	3297	1499	0	479950	108460
PIPER PA44	225	63	57162	31830	302	0	67029	23495
PROPIJT200	31	4	389	186	52	0	3343	397
RAVEN S50	0	0	0	0	37	0	1007	332
RAVEN S55	0	0	0	0	624	0	29154	4515
RKHELL700	19	0	959	173	18	2	1934	684
RKHELLNA285	337	0	35720	15604	337	0	94495	24119
ROBSINR22	3	2	83	115	167	2	69105	6297
RYAN ST3	0	0	0	0	71	0	2006	435
RYAN STA	0	0	0	0	11	0	226	22
SCHWZERG184	0	0	0	0	793	0	192251	41779
SCHWZERSG1	14	12	519	3052	590	0	40891	6818
SCHWZERSG2	0	0	0	0	473	0	103663	25799
SEMCO CLINGER	0	0	0	0	19	0	743	95
SKRSKYS55	2	2	0	0	12	2	2165	464
SKRSKYS58	0	0	0	0	22	0	2995	560
SMITH 800	312	0	33308	0	312	0	7312	0
SNIAS 350	53	22	3066	890	227	0	78072	11883

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MANUFACTURER/ MODEL GROUP	IMC			VMC		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
STNSON10	0	0	0	0	44	171
STNSONL5	0	0	0	0	35	188
STNSONV77	0	0	0	0	36	145
STOLAMRC3	2	2	7	68	83	697
TCRAFKD	0	0	0	0	121	633
TCRAFTA	0	0	0	0	9	35
TCRAFTBC	0	0	0	0	875	4778
TCRAFTBL	0	0	0	0	69	441
THUNDRAX7	1	1	94	130	40	187
TMPSONNAVION	35	35	257	2045	514	36549
TRYTEK85	0	0	0	0	123	521
UNIVACGC1	41	53	1857	0	480	9053
UNIVAR108	24	15	875	102	1154	5147
UNIVAR415	15	36	73	142	1703	18976
VARGA 2150	15	6	282	89	115	1081
WACO ASO	0	0	0	0	9	42
WACO UPF7	0	0	0	0	77	1538
WACO YK	6	2	188	0	6	113
TOTALS	76141	1568	4879824	288537	211622	866031

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
OTHER 01	6702	115	393279	56144	450	175	20914	9680
OTHER 02	2252	103	168801	45882	1332	246	23427	7260
OTHER 03	398	0	25704	13895	203	93	6580	7137
OTHER 04	435	0	101649	50666	296	95	12761	7126
OTHER 05	40	0	6337	2731	30	6	4080	1994
OTHER 06	921	0	137007	33303	819	87	59902	18324
OTHER 07	342	0	532238	70923	307	33	108483	26796
OTHER 08	44	0	12830	3231	18	9	375	222
OTHER 09	1307	0	332177	50165	1243	58	122134	21753
OTHER 10	246	0	42043	8777	248	0	4782	1271
OTHER 11	422	0	7202	5287	3	16	10	55
OTHER 12	838	0	452530	61835	375	120		21896
OTHER 13	2572	66	169965	25950	86	66	140	1240
AERORSJ2	9	0	272	56	0	0	0	0
AGUSTAA109	32	0	3411	700	12	3	385	118
AIRPTSA	140	0	16728	5059	11	13	211	259
AIRSPC18	9	0	197	37	0	0	0	0
AIRTRCAT300	362	0	131765	22096	0	0	0	0
AMD FALC10	136	0	25806	6747	116	20	8928	2735
AMD FALC20	201	0	62407	11085	201	0	27420	8256
AMD FALC50	88	0	10765	6323	54	21	5039	2766

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MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	DAY			NIGHT		
		STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
AMTR TMK	2	0	67	27	0	0	0
ARCTICS1A	37	0	2099	300	3	1	67
ARCTICS1B1	10	0	463	76	0	0	0
ARONCA15	104	0	11869	5093	48	36	476
ARONCA58	61	0	6411	3018	0	0	0
ARONCA65	78	0	2989	477	0	0	0
ARONCAC3	13	0	320	36	0	0	0
AVIANWALCON	21	0	679	81	0	0	0
AYRES S2	600	0	149035	30830	23	54	4145
AYRES S2T	58	0	17745	5451	31	13	327
BAG B206	24	0	2658	558	24	0	559
BALWKSFIREFY	1025	0	34799	5481	71	61	144
BEECH 17	93	0	3694	242	33	5	285
BEECH 18	445	4	102895	9694	295	18	45322
BEECH 200	815	0	272786	31202	815	0	78488
BEECH 23	2709	0	329292	75306	1468	215	74335
BEECH 33	1595	0	182736	19784	1175	145	63499
BEECH 35	6285	18	582317	50916	4110	336	57995
BEECH 36	1938	0	323008	36671	1483	170	38046
BEECH 45	122	0	3173	1827	3	12	14
BEECH 50	190	0	17710	2355	40	48	289
							1221

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BEECH 55	2100	81	301902	29709	1884	129	146194	62307
BEECH 58	1422	0	335201	56223	1337	67	80810	13632
BEECH 60	425	0	51847	7785	387	39	13551	4572
BEECH 65	116	0	15433	2706	90	12	4466	1501
BEECH 77	232	0	54083	4455	158	63	3280	2268
BEECH 80	127	0	22423	2907	117	4	6622	1087
BEECH 90	1070	0	281505	32214	1070	0	65332	10604
BEECH 95	480	0	30877	6860	316	98	4792	5885
BELL 204	108	3	10440	1994	47	8	1495	798
BELL 206	2062	42	786142	86605	1097	163	78250	25407
BELL 222	51	0	20721	2809	41	5	1758	300
BELL 47	692	8	142614	24650	318	70	12009	11683
BLANCA11	342	0	19774	7080	0	0	0	0
BLANCA1413	118	0	4575	725	58	11	415	428
BLANCA1418	193	4	11100	2961	81	18	877	169
BLANCA17	870	0	72021	15987	314	142	7869	1904
BLANCA7	3940	18	392300	33982	873	111	12433	2625
BLANCA8	566	0	88642	27585	202	88	1284	2229
BNORM BN2	120	0	25842	22825	25	39	3535	1515
BNORM BN2MK3	11	0	6085	1739	8	2	1927	66
BOEING75	877	78	44429	14426	88	80	6004	986

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BOEINGC97	7	0	144	29	4	1	141	86
BUKER 131	11	0	411	83	0	0	0	0
CAMRONMODELO	97	0	4800	694	17	7	48	482
CESSNA120	612	8	25411	2965	139	38	987	1385
CESSNA140	1540	0	70649	11001	696	176	5577	1783
CESSNA150	17825	23	3652768	295249	11473	607	321398	32610
CESSNA170	2016	41	119612	15384	1146	149	8747	1993
CESSNA172	22992	95	3625067	292363	15133	670	438616	48028
CESSNA175	975	0	55803	6859	581	81	7701	3379
CESSNA177	2824	18	374276	77535	1819	239	82128	31640
CESSNA180	1952	67	235241	69184	929	187	20299	8727
CESSNA182	12824	19	1298114	109673	8010	494	175894	24029
CESSNA185	1589	0	292260	117215	611	196	11744	10352
CESSNA188	1454	120	282382	47581	350	182	35015	10714
CESSNA205	246	0	10494	3444	145	53	824	1175
CESSNA206	2874	0	532277	111466	1536	280	44879	12293
CESSNA207	279	0	95184	33539	178	52	12976	9204
CESSNA210	5929	0	695871	56715	4777	287	131246	36039
CESSNA305	273	0	50975	18844	77	68	260	1993
CESSNA310	2658	49	329305	56747	1938	164	144888	48675
CESSNA320	318	0	37517	6894	223	26	6975	1756

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
CESSNA335	50	0	7351	48	2	1402
CESSNA337	1138	13	129345	979	77	30441
CESSNA340	918	0	146804	918	0	31870
CESSNA401	238	0	46937	238	0	18882
CESSNA402	732	0	299904	732	0	145002
CESSNA411	121	0	14800	110	11	4662
CESSNA414	779	0	152328	721	69	32067
CESSNA421	1253	0	250952	1238	33	84854
CESSNA425	128	0	25420	123	6	8124
CESSNA441	231	0	60253	193	43	17305
CESSNA500	511	0	176807	511	0	60183
CESSNA750	18	0	293	8	5	6
COMWTH185	33	0	1164	3	2	54
CONAERLA4	422	0	41218	292	83	3742
CURTISC48	30	0	5187	22	5	1285
CURTISTRVAIR	36	0	2518	0	0	0
CVAC 240	6	0	337	5	1	68
CVAC 340	7	0	930	7	0	452
CVAC BT13	30	0	1228	5	1	4
CVAC P4Y	6	0	218	0	0	0
DHAV DHC1	59	0	5730	11	3	122
						47

**GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983**

MANUFACTURER/ MODEL GROUP	DAY			NIGHT				
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
DHC2	178	0	42707	5878	48	8	717	514
	18	0	8242	2558	9	4	1251	3
	81	0	57810	18533	80	5	27695	15555
	51	0	2814	266	0	0	0	0
	11	0	481	75	4	1	20	21
	183	7	35977	8613	60	12	6051	1299
	17	0	1393	96	10	4	38	583
	33	0	3832	2253	11	8	2281	2770
	28	0	3700	809	14	4	1895	528
	62	0	8535	1781	0	0	0	0
EIRVN20	97	0	8333	545	0	0	0	0
	19	0	0	0	0	0	0	0
	278	0	28595	9382	154	81	18753	17812
	5	2	248	221	4	2	101	207
	0	0	0	0	0	0	0	0
	85	2	3118	404	7	3	201	41
	17	0	1183	128	17	0	172	28
	93	2	3550	414	9	3	107	308
	84	0	4772	809	0	0	0	0
	400	0	30298	6286	384	67	3592	1857
GRUMAVAA5	248	0	27780	2729	110	84	451	4178

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR
GRUMAVG164	656	0	92217	12252	0	0
GRUMAVTBM	10	0	324	76	0	0
GULSTM112	830	0	59787	11553	450	91
GULSTM500	248	38	36275	10351	282	26
GULSTM680	187	21	22407	6287	111	31
GULSTM680TP	123	0	7920	980	123	0
GULSTM690TP	476	0	89532	17419	420	48
GULSTMAA1	441	0	28306	11158	291	94
GULSTMAA5	1239	0	121194	23738	851	139
GULSTMG1159	178	0	60377	7105	178	0
GULSTMG159	132	0	39399	5385	131	3
HELIO H391	10	0	339	62	3	1
HILLERFH1100	20	0	1330	238	2	2
HILLERUH12	423	0	131079	17476	110	30
HUGHES269	521	12	130977	16300	339	38
HUGHES369	582	0	230503	95358	236	181
HMKSLYDH104	0	0	0	0	0	0
HMKSLYDH114	1	0	1832	0	1	0
HMKSLYDH125	189	0	47630	11346	158	30
INTRCP200	27	1	1537	320	13	2
ISRAEL1124	176	0	38107	2692	176	0

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
JBMSTRDGA15	19	0	591	74	4	2	14	197
LAIKFN10	8	0	280	85	0	0	0	0
LEAR 35	354	0	112020	22082	354	0	42501	10560
LKHEED1328	78	0	15998	2483	76	0	6316	2289
LKHEED18	17	0	570	133	11	5	51	424
LKHEEDT33	2	0	11	0	0	0	0	0
LUSCOM8	1258	40	82030	18417	178	78	1936	4402
MARTIN404	0	0	0	0	0	0	0	0
MAULE M5	342	0	23791	4688	212	47	2088	718
MCLISHFUNK8	63	0	2518	311	5	2	22	298
MNCUP90	19	0	740	144	3	2	3	153
MMITEM18	72	0	1772	260	1	3	10	16
MOONEYM20	5475	0	518848	38700	4844	238	85459	11050
MTSBSIMU2	352	0	45058	15100	352	0	25087	5840
MULTECD16	32	0	2159	200	17	3	175	24
NAMER F51	53	0	2782	491	1	2	15	17
NAMER NA280	40	0	1810	314	5	3	22	13
NAMER T8	403	8	22410	2590	81	19	1029	375
NAVIONNAVION	353	0	18759	3258	108	68	879	519
NORD SV4	29	0	1028	141	1	1	2	18
NORWT65	22	0	952	98	0	0	0	0

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ORLHELH19	13	0	2585	527	5	2	171	39
PICARDAX6	125	0	6664	2943	0	0	0	0
PIPER 600	388	0	74670	14310	319	47	17040	4161
PIPER J2	14	0	384	53	0	0	0	0
PIPER J3	2458	11	106955	20822	7	21	59	135
PIPER J4	83	0	2136	510	0	0	0	0
PIPER J5	80	0	3084	718	0	0	0	0
PIPER PA12	829	0	50297	20206	302	131	3380	4895
PIPER PA15	88	0	3215	1042	0	0	0	0
PIPER PA16	232	0	6808	1532	33	27	108	1435
PIPER PA17	69	0	2378	185	6	3	11	5
PIPER PA18	2617	0	420068	80521	559	185	10816	5098
PIPER PA20	323	0	21471	3736	76	26	343	232
PIPER PA22	3201	0	255379	105744	1204	268	25576	12000
PIPER PA23	2891	43	429487	54147	2034	189	190209	53233
PIPER PA24	2953	0	260613	32671	1626	255	27069	5136
PIPER PA25	964	0	188439	30581	0	0	0	0
PIPER PA28	21047	90	2510070	226987	14488	618	361993	33486
PIPER PA30	1057	0	124604	17659	856	124	28125	9011
PIPER PA31	1987	0	581048	113906	1576	133	240304	67507
PIPER PA31T	567	0	120662	21021	495	43	54157	16832

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	DAY			NIGHT		
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN
PIPER PA32	3988	0	661448	3029	248	121639
PIPER PA34	2206	0	438574	2005	113	157245
PIPER PA38	404	18	65189	18	38	968
PIPER PA38	1499	0	398062	1085	157	89748
PIPER PA44	302	0	102266	261	49	21925
PROPIJT200	52	0	3281	38	4	471
RAVEN S50	37	0	1007	0	0	0
RAVEN S55	621	6	29107	3	6	48
RKWELL700	19	0	2178	19	0	715
RKWELLNA265	337	0	109423	337	0	20792
ROBSINR22	169	0	64865	105	8	4323
RYAN ST3	71	0	2006	0	0	0
RYAN STA	11	0	226	0	0	0
SCHWZERG184	793	0	192251	0	0	0
SCHWZERSG1	583	8	41161	7	8	323
SCHWZERSG2	472	7	103610	1	7	54
SEMCO CLINGER	19	0	733	2	1	11
SKRSKYS55	14	0	2339	9	2	165
SKRSKYS58	22	0	2986	3	2	9
SMITH 800	312	0	36558	312	0	4062
SNIAS 350	224	5	70257	186	20	10882
						2879

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
STNSON10	42	2	1427	172	6	3	19	4
STNSONL5	35	0	1442	174	6	2	33	11
STNSONV77	38	0	1168	138	7	2	33	3
STOLAMRC3	82	2	3741	676	14	5	184	246
TCRAFKD	121	0	2009	633	0	0	0	0
TCRAFTA	9	0	237	35	0	0	0	0
TCRAFTBC	873	5	38407	4790	15	14	369	389
TCRAFTBL	69	0	3899	441	0	0	0	0
THUNDRA7	38	2	1359	296	4	2	8	27
TMPSONNAVION	514	0	91912	36692	208	69	2958	4172
TRYTEK65	123	0	4210	521	2	3	5	9
UNIVACGC1	480	0	28303	9704	294	93	1931	1774
UNIVAR108	1159	0	55050	4610	315	48	3706	685
UNIVAR415	1703	0	72417	19324	186	121	5730	2734
VARGA 2150	121	0	7346	1045	34	8	354	107
WACO ASD	9	0	218	42	0	0	0	0
WACO UPF7	75	4	5160	1557	3	4	263	85
WACO YK	12	0	234	39	0	0	0	0
TOTALS	211925	309	30185282	642870	121847	1770	5063890	227490

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

PAGE 1 OF 10

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
FIXED WING												
1 ENG: 1-3 SEATS												
ESTIMATED POPULATION	39279	17659	9503	29863	21977	3330	62244	13898	7725	4730	230	69205
% STANDARD ERROR	A	A	A	A	A	B	A	A	A	B	D	A
ESTIMATED % OF TYPE	46.6	21.0	11.3	35.2	26.1	4.4	73.9	16.5	9.2	5.6	0.3	82.2
1 ENG: 4+ SEATS												
ESTIMATED POPULATION	58753	66521	84853	4115	102895	47742	16654	88495	84083	73021	440	28125
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF TYPE	49.1	55.6	71.0	3.4	86.1	39.9	13.9	72.4	70.3	81.1	0.4	23.5
1 ENGINE: TOTAL												
ESTIMATED POPULATION	98032	84180	94358	33778	124872	51432	78898	100393	91808	77751	670	97330
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF TYPE	48.1	41.3	46.3	16.6	61.3	25.2	38.7	49.3	45.1	38.2	0.3	47.8
2 ENG: 1-6 SEATS												
ESTIMATED POPULATION	6438	13897	16356	349	18099	14840	592	17952	17767	17028	77	709
% STANDARD ERROR	A	A	A	D	A	A	C	A	A	A	D	C
ESTIMATED % OF TYPE	34.4	74.3	87.5	1.9	96.8	78.3	3.2	98.0	95.1	91.1	0.4	3.6
2 ENG: 7+ SEATS												
ESTIMATED POPULATION	3255	7507	8545	396	9435	8521	695	9469	9360	9368	23	589
% STANDARD ERROR	A	A	A	B	A	A	B	A	A	A	D	B
ESTIMATED % OF TYPE	32.1	74.1	84.4	3.9	93.1	84.1	6.9	93.5	92.4	92.5	0.2	5.8

*****				*****			
STANDARD ERROR		LESS THAN OR EQUAL TO		CODE			
GREATER THAN							
-----		-----		-----			
0 %	10 %			A			
10 %	20 %			B			
20 %	30 %			C			
30 %				D			
*****				*****			

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
2 ENGINE: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	9893 A	21404 A	24901 A	745 C	27533 A	23161 A	1288 B	27421 A	27127 A	26396 A	100 D	1298 B
	33.8	74.3	86.4	2.8	95.5	80.4	4.5	95.1	94.1	91.6	0.3	4.5
PISTON: OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	88 B	206 A	196 A	42 D	254 A	129 B	73 C	226 A	222 A	217 A	0 A	101 B
	26.8	63.1	59.8	12.9	77.8	39.6	22.2	69.0	67.9	66.4	0.0	31.0
PISTON: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	107812 A	105790 A	119453 A	34565 A	152659 A	74722 A	80259 A	128040 A	119157 A	104364 A	769 C	98730 A
	48.3	45.4	51.3	14.8	65.5	32.1	34.5	55.0	51.2	44.8	0.3	42.4
FIXED WING-TURBOPROP												
2 ENG: 1-12 SEATS ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	754 C	4518 A	4572 A	9 D	4867 A	4778 A	1 D	4830 A	4830 A	4764 A	44 D	38 D
	15.5	92.8	93.9	0.2	100.0	98.1	0.0	99.2	99.2	97.9	0.9	0.8
2 ENG: 13+ SEATS ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	25 D	635 A	608 A	8 D	660 A	564 A	8 D	640 A	640 A	640 A	0 A	28 D
	3.8	94.9	90.8	1.1	98.7	84.2	1.1	95.7	95.7	95.7	0.0	4.2

*****			*****		
STANDARD ERROR	LESS THAN OR EQUAL TO	CODE	STANDARD ERROR	LESS THAN OR EQUAL TO	CODE
GREATER THAN	0 %	A	GREATER THAN	0 %	A
10 %	10 %	B	10 %	10 %	B
20 %	20 %	C	20 %	20 %	C
30 %	30 %	D	30 %	30 %	D
*****	*****	*****	*****	*****	*****

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
2 ENGINE: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	779	5153	5180	16	5527	5341	9	5470	5470	5404	44	66
	C	A	A	D	A	A	D	A	A	A	D	D
	14.1	93.1	93.5	0.3	99.8	96.5	0.2	98.8	98.8	97.6	0.8	1.2
TURBOPROP: OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	68	48	87	99	87	64	117	93	80	87	19	111
	D	D	D	D	D	D	D	D	D	D	D	D
	33.5	23.7	42.4	48.7	42.4	31.5	57.6	45.5	39.1	42.4	9.2	54.5
TURBOPROP: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	847	5202	5266	115	5614	5405	126	5563	5550	5490	63	177
	C	A	A	D	A	A	D	A	A	A	D	D
	14.8	90.6	91.7	2.0	97.8	94.2	2.2	96.9	96.7	95.6	1.1	3.1
FIXED WING-TURBOJET												
2 ENGINE TURBOJET ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	326	3343	3335	89	3608	3516	47	3655	3655	3583	207	0
	D	A	A	D	A	A	D	A	A	A	D	A
	8.9	91.5	91.3	2.4	98.7	96.2	1.3	100.0	100.0	98.0	5.7	0.0
TURBOJET: OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	41	648	627	32	679	668	41	681	679	676	0	39
	D	A	A	D	A	A	D	A	A	A	A	D
	5.8	90.0	87.0	4.5	94.3	92.8	5.7	94.6	94.3	94.0	0.0	5.4

STANDARD ERROR			CODE	
GREATER THAN			LESS THAN OR EQUAL TO	
0 %	10 %	A		
10 %	20 %	B		
20 %	30 %	C		
30 %		D		

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GENERAL AVIATION AVIONICS EQUIPMENT

人

AIRCRAFT TYPE

1983

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AIRCRAFT TYPE		VHF COMMUNICATIONS					TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
		360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS	
TURBOJET: TOTAL	ESTIMATED POPULATION	367	3990	3962	122	4287	4184	88	4336	4334	4260	207	39	
	% STANDARD ERROR	D	A	A	D	A	A	D	A	A	A	D	D	
FIXED WING: TOTAL	ESTIMATED POPULATION	109027	114982	128881	34802	162560	84311	80473	137939	129041	114114	1039	98945	
	% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A	
ROTORCRAFT	ESTIMATED POPULATION	44.9	47.3	52.9	14.3	66.9	34.7	33.1	56.8	53.1	47.0	0.4	40.7	
	% STANDARD ERROR	B	B	C	A	B	D	A	D	D	D	A	A	
PISTON	ESTIMATED POPULATION	1516	1078	381	2861	1024	76	4389	189	16	74	0	5222	
	% STANDARD ERROR	B	B	C	A	B	D	A	D	D	D	A	A	
TURBINE	ESTIMATED POPULATION	798	3674	2435	267	3503	1580	1077	1937	1225	1356	2	2643	
	% STANDARD ERROR	C	A	B	D	A	B	B	B	B	B	D	A	
ROTORCRAFT: TOTAL	ESTIMATED POPULATION	2313	4752	2816	3128	4527	1656	5466	2127	1241	1431	2	7854	
	% STANDARD ERROR	B	A	A	A	A	B	A	B	B	B	D	A	
PISTON	ESTIMATED POPULATION	23.1	47.5	28.2	31.3	45.3	16.6	54.7	21.3	12.4	14.3	0.0	78.7	
	% STANDARD ERROR	B	A	A	A	A	B	A	B	B	B	D	A	

* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *
STANDARD ERROR	LESS THAN	OR	EQUAL TO	A	B	C	D
GREATER THAN	10 %	20 %	30 %	0 %	10 %	20 %	30 %
CODE	---						

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

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AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
OTHER	2475	1137	149	3906	288	60	7188	33	0	0	0	7443
	B	B	D	A	D	D	A	D	A	A	A	A
	33.1	15.2	2.0	52.3	3.9	0.8	96.1	0.4	0.0	0.0	0.0	99.6
TOTAL	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
	A	A	A	A	A	A	A	A	A	A	C	A
	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4	43.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
*	STANDARD ERROR	*	CODE	*	*	*	*	*	*	*	*	*
*	-----	*	----	*	*	*	*	*	*	*	*	*
*	GREATER	*	LESS THAN	*	*	*	*	*	*	*	*	*
*	THAN	*	OR	*	*	*	*	*	*	*	*	*
*	-----	*	EQUAL TO	*	*	*	*	*	*	*	*	*
*	0 %	*	10 %	*	*	*	*	*	*	*	*	*
*	10 %	*	20 %	*	*	*	*	*	*	*	*	*
*	20 %	*	30 %	*	*	*	*	*	*	*	*	*
*	30 %	*		*	*	*	*	*	*	*	*	*
*	*****	*	*****	*	*****	*	*****	*	*****	*	*****	*

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

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AIRCRAFT TYPE	NAVIGATION EQUIPMENT											FLTMGT COMPTN	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT				
FIXED WING													
FIXED WING - PISTON													
1 ENG: 1-3 SEATS													
1 ENG: 4+ SEATS													
1 ENGINE: TOTAL													
2 ENG: 1-6 SEATS													
2 ENG: 7+ SEATS													

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

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AIRCRAFT TYPE	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPT	
2 ENGINE: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	7859	21959	26186	26620	24496	11591	1300	9007	6838	1847	797
	A	A	A	A	A	A	B	A	A	B	B
	27.3	76.2	90.9	92.4	85.0	40.2	4.5	31.3	23.7	6.4	2.8
PISTON: OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	40	254	210	226	135	31	18	11	40	0	44
	D	A	A	A	B	D	D	D	D	A	C
	12.2	77.6	64.2	69.2	41.1	9.6	5.5	3.4	12.4	0.0	13.5
PISTON: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	80185	120420	124799	120198	74359	23274	4644	15054	10579	2798	41088
	A	A	A	A	A	A	B	A	A	B	A
	34.4	51.7	53.6	51.6	31.9	10.0	2.0	6.5	4.5	1.2	17.6
FIXED WING-TURBOPROP											
2 ENG: 1-12 SEATS ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	349	4524	4735	4756	4798	3844	610	4402	4208	339	0
	D	A	A	A	A	A	C	A	A	D	A
	7.2	92.9	97.3	97.7	98.6	79.0	12.5	90.4	86.4	7.0	0.0
2 ENG: 13+ SEATS ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	35	605	640	659	603	311	141	302	421	46	8
	D	A	A	A	A	C	D	C	B	D	D
	5.2	90.5	95.7	98.5	90.2	48.5	21.0	45.2	63.0	6.8	1.1

*	STANDARD ERROR	CODE
*	-----	---
*	GREATER	LESS THAN
*	THAN	OR
*	-----	EQUAL TO
*	0 %	10 %
*	10 %	20 %
*	20 %	30 %
*	30 %	
*		A
*		B
*		C
*		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

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AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTMGT COMPTN	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
2 ENGINE: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	383 D 6.9	5129 A 92.6	5375 A 97.1	5415 A 97.8	5402 A 97.6	4156 A 75.1	751 C 13.6	4704 A 85.0	4629 A 83.6	385 D 6.9	8 D 0.1	
TURBOPROP: OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	63 D 31.0	47 D 22.8	76 D 37.3	93 D 45.5	71 D 34.6	8 D 3.8	10 D 5.0	55 D 26.8	17 D 8.5	9 D 4.2	103 D 50.6	
TURBOPROP: TOTAL ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	447 C 7.8	5176 A 90.2	5451 A 95.0	5508 A 95.9	5472 A 95.3	4163 A 72.5	761 C 13.3	4759 A 82.9	4647 A 80.9	393 D 6.8	111 D 1.9	
FIXED WING-TURBOJET												
2 ENGINE TURBOJET ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	359 D 9.8	3443 A 94.2	3560 A 97.4	3560 A 97.4	3608 A 98.7	1929 B 52.8	2343 A 64.1	3595 A 98.4	3546 A 97.0	942 B 25.8	47 D 1.3	
TURBOJET: OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF TYPE	54 D 7.5	627 A 87.1	627 A 87.1	681 A 94.6	679 A 94.3	235 D 32.7	567 B 78.8	666 A 92.5	602 B 83.6	244 D 34.0	35 D 4.8	

*****	STANDARD ERROR	CODE	*****
*	-----	---	*
*	GREATER	LESS THAN	*
*	THAN	OR	*
*	-----	EQUAL TO	*
*	0 %	10 %	*
*	10 %	20 %	*
*	20 %	30 %	*
*	30 %		*
*			*
*			*
*****			*****

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

PAGE 10 OF 10

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	
OTHER											
ESTIMATED POPULATION	72	112	14	37	24	57	0	0	5	61	7179
% STANDARD ERROR	D	D	D	D	D	D	A	A	D	D	A
ESTIMATED % OF TYPE	1.0	1.5	0.2	0.5	0.3	0.8	0.0	0.0	0.1	0.8	96.0
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR	CODE
GREATER THAN	
LESS THAN OR EQUAL TO	
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MPKR BEC	GLIDE SLOPE	MLS	NO ILS
ALABAMA	1111	1549	1775	690	2218	1150	855	1734	1599	1453	0	1339
	C	C	B	D	B	C	C	B	C	C	A	C
ESTIMATED POPULATION	37.2	51.9	59.4	23.1	74.3	38.5	28.6	58.1	53.5	48.6	0.0	44.8
ESTIMATED % OF STATE												
ALASKA	4364	2520	2159	934	2877	580	4688	2474	2141	1975	0	4854
	B	B	B	C	B	D	B	B	B	B	A	B
ESTIMATED POPULATION	57.5	33.2	28.5	12.3	37.9	7.6	61.8	32.6	28.2	26.0	0.0	64.0
ESTIMATED % OF STATE												
ARIZONA	1532	3386	3135	1121	3928	2015	1910	2947	2925	2512	0	2699
	C	B	B	C	B	B	B	B	B	B	A	B
ESTIMATED POPULATION	24.0	53.1	49.1	17.6	61.6	31.6	29.9	46.2	45.8	39.4	0.0	42.3
ESTIMATED % OF STATE												
ARKANSAS	1277	970	1415	826	1672	726	1224	1341	1480	1227	5	1402
	C	C	C	D	C	C	C	C	C	C	D	C
ESTIMATED POPULATION	41.3	31.4	45.8	26.7	54.1	23.5	29.6	43.4	47.9	39.7	0.2	45.4
ESTIMATED % OF STATE												
CALIFORNIA	15057	17709	18119	4826	24394	13249	10904	20413	19075	16393	91	13719
	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED POPULATION	43.2	50.8	52.0	13.9	70.0	38.0	31.3	58.6	54.8	47.1	0.3	39.4
ESTIMATED % OF STATE												

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
COLORADO												
	ESTIMATED POPULATION	3048	2293	2619	559	3472	1521	2053	2316	1954	157	2528
	% STANDARD ERROR	B	B	D	D	B	C	B	B	B	D	B
CONNECTICUT												
	ESTIMATED POPULATION	692	725	963	366	987	426	775	944	933	0	740
	% STANDARD ERROR	D	D	C	D	C	D	C	C	C	A	C
DELAWARE												
	ESTIMATED POPULATION	254	567	686	87	723	433	126	662	591	0	155
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
DC												
	ESTIMATED POPULATION	1	59	60	1	60	58	1	60	59	0	1
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
FLORIDA												
	ESTIMATED POPULATION	6840	7491	7813	1967	10662	5783	4409	8578	7214	0	5601
	% STANDARD ERROR	A	A	A	B	A	B	B	A	A	A	B
	ESTIMATED % OF STATE	45.0	50.8	53.0	13.3	72.3	39.2	29.9	58.2	48.9	0.0	38.0

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
GEORGIA												
	2088	3020	2954	1025	3882	1894	1938	3314	2586	2642	6	2486
	% STANDARD ERROR	B	B	C	B	B	B	B	B	B	D	B
	36.9	53.5	52.3	18.1	68.7	33.5	34.3	58.7	47.5	46.8	0.1	44.0
HAWAII												
	251	231	175	66	440	82	104	225	160	161	0	313
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
	42.9	39.5	29.9	11.3	75.3	14.1	17.8	38.6	27.4	27.6	0.0	53.6
IDAHO												
	1004	1128	962	455	1503	853	1031	1192	1042	1095	0	1327
	% STANDARD ERROR	C	C	D	C	C	C	C	C	C	A	C
	37.6	42.2	36.0	17.0	56.3	31.9	38.6	44.7	39.0	41.0	0.0	49.7
ILLINOIS												
	3789	4771	5583	1441	6691	3174	2665	5556	5056	4485	76	3708
	% STANDARD ERROR	B	B	C	B	B	B	B	B	B	D	B
	40.3	50.7	59.4	15.3	71.2	33.8	28.3	59.1	53.8	47.5	0.8	39.4
INDIANA												
	2184	2434	2731	627	3229	1698	1525	2929	2781	2328	0	1672
	% STANDARD ERROR	B	B	C	B	C	B	B	B	B	A	B
	48.2	51.4	57.7	13.3	68.2	35.9	32.2	61.9	58.8	49.2	0.0	35.3

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF-BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
IOWA												
	ESTIMATED POPULATION	1766	1563	2111	811	2250	938	1646	1946	1621	67	1553
	% STANDARD ERROR	C	C	B	C	B	C	C	B	C	D	C
KANSAS												
	ESTIMATED POPULATION	45.8	40.4	54.5	20.9	58.1	24.2	42.5	50.3	41.9	1.7	40.1
	% STANDARD ERROR											
KENTUCKY												
	ESTIMATED POPULATION	1956	2489	2568	848	3174	1492	1799	2710	2347	0	1980
	% STANDARD ERROR	B	B	B	C	B	C	B	B	B	A	B
LOUISIANA												
	ESTIMATED POPULATION	897	1159	1065	269	1402	736	733	1104	930	0	920
	% STANDARD ERROR	C	C	C	D	C	C	C	C	C	A	C
MAINE												
	ESTIMATED POPULATION	43.8	37.1	34.3	27.9	47.8	24.7	51.6	49.2	42.5	0.3	61.2
	% STANDARD ERROR											

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
MARYLAND	1821	1652	2100	550	2646	1545	959	2163	1937	1718	0	1348
	C	C	B	D	B	C	C	B	B	C	A	C
	48.2	47.1	59.9	15.7	75.4	44.1	27.4	61.7	55.2	49.0	0.0	38.4
MASSACHUSETTS	1511	1557	1788	594	2035	1190	1346	1973	1798	1532	0	1405
	C	C	C	D	B	C	C	B	C	C	A	C
	45.3	46.7	53.5	17.8	61.0	35.7	40.3	59.1	53.9	45.9	0.0	42.1
MICHIGAN	4450	3526	4184	1403	4819	2473	3834	4044	3961	2901	93	4143
	B	B	B	C	B	B	B	B	B	B	D	B
	51.1	40.5	48.0	16.1	55.3	28.4	44.0	46.4	45.5	33.3	1.1	47.6
MINNESOTA	2448	2173	2328	1457	3044	1209	2869	2470	2194	2003	0	3353
	B	B	B	C	B	C	B	B	B	B	A	B
	42.7	37.9	40.6	25.4	53.1	21.1	50.0	43.0	38.2	34.9	0.0	58.4
MISSISSIPPI	1009	1409	1219	598	1964	1176	964	1504	1454	1371	0	1381
	C	C	C	D	B	C	C	C	C	C	A	C
	34.6	48.3	41.8	20.5	67.3	40.3	33.0	51.6	49.8	47.0	0.0	47.3

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
MISSOURI												
	2171	2302	2087	622	2630	1122	1940	2279	1834	1688	25	2196
	B	B	B	C	B	C	B	B	B	C	D	B
	45.7	48.5	43.9	13.1	55.4	23.6	40.8	48.0	38.6	35.6	0.5	46.2
MONTANA												
	1350	1189	995	565	1782	533	1313	882	1092	847	0	1977
	C	C	C	D	C	D	C	C	C	C	A	B
	44.5	39.2	32.8	18.6	58.8	17.6	43.3	29.1	36.0	27.9	0.0	65.2
NEBRASKA												
	708	314	487	346	711	160	649	465	369	229	0	752
	D	D	D	D	D	D	D	D	D	D	A	C
	53.9	24.0	37.2	26.4	54.3	12.2	49.6	35.5	28.2	17.5	0.0	57.5
NEVADA												
	1329	1135	1573	385	1863	1336	868	1817	1787	1727	0	910
	C	C	C	D	B	C	C	C	C	C	A	C
	49.2	42.0	58.3	14.3	69.0	49.5	32.2	67.3	66.2	64.0	0.0	33.7
NEW HAMPSHIRE												
	688	789	914	264	1139	697	551	1054	897	738	0	633
	D	D	C	D	C	D	D	C	C	D	A	D
	41.6	47.7	55.3	16.0	68.9	42.2	33.3	63.7	54.2	44.5	0.0	38.3

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
NEW JERSEY	2363	2080	2419	664	3042	1938	1522	2845	2468	2420	0	1910
	B	B	B	C	B	B	C	B	B	B	A	B
	51.3	45.2	52.5	14.4	66.1	42.1	33.0	57.4	53.6	52.6	0.0	41.5
NEW MEXICO	906	1535	1131	401	1991	1034	833	1875	1377	1333	0	1145
	C	C	C	D	B	C	C	C	C	C	A	C
	31.3	53.1	39.1	13.9	68.8	35.8	28.8	57.9	47.6	46.1	0.0	39.6
NEW YORK	3971	3085	3241	1261	4395	2336	3442	3982	3543	3040	181	3850
	B	B	B	C	B	B	B	B	B	B	D	B
	50.5	39.2	41.2	16.0	55.9	29.7	43.8	50.6	45.0	38.7	2.3	49.0
NORTH CAROLINA	2596	2016	2878	848	3477	1618	1434	3015	2941	2550	2	1795
	B	B	B	C	B	B	C	B	B	B	D	B
	51.8	40.2	57.4	16.9	69.4	32.3	28.6	60.1	58.7	50.9	0.0	35.8
NORTH DAKOTA	880	635	739	480	951	480	953	702	664	666	0	1114
	C	D	D	D	C	D	C	D	D	D	A	C
	46.6	33.6	39.1	25.4	50.4	25.4	50.4	37.2	35.2	35.3	0.0	59.0

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	---
EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
OHIO	ESTIMATED POPULATION	4239	4091	4963	1649	5511	2821	3789	4558	4017	0	4353
	% STANDARD ERROR	B	B	B	B	B	B	B	B	B	A	B
OKLAHOMA	ESTIMATED POPULATION	47.4	45.7	55.5	18.4	61.6	31.5	42.4	51.0	44.9	0.0	48.7
	% STANDARD ERROR	B	B	B	B	B	B	B	B	B	A	B
OREGON	ESTIMATED POPULATION	3013	2897	3154	922	4046	2266	2170	2806	2755	0	2946
	% STANDARD ERROR	B	B	B	C	B	B	B	B	B	A	B
PENNSYLVANIA	ESTIMATED POPULATION	47.6	45.8	49.9	14.6	64.0	35.8	34.3	44.4	43.6	0.0	46.6
	% STANDARD ERROR	B	B	B	B	B	B	B	B	B	A	B
RHODE ISLAND	ESTIMATED POPULATION	2992	2228	2996	598	3755	1946	1806	3005	2471	1	2295
	% STANDARD ERROR	B	B	B	D	B	B	B	B	B	D	B
RHODE ISLAND	ESTIMATED POPULATION	52.2	38.9	52.2	10.4	65.5	33.9	31.5	52.4	43.1	0.0	40.0
	% STANDARD ERROR	B	B	B	C	B	B	B	B	B	D	B
RHODE ISLAND	ESTIMATED POPULATION	2882	3960	3691	969	4785	3097	2573	4025	3630	3	3170
	% STANDARD ERROR	B	B	B	C	B	B	B	B	B	D	B
RHODE ISLAND	ESTIMATED POPULATION	38.1	52.4	48.8	12.8	63.3	40.9	34.0	53.2	48.0	0.0	41.9
	% STANDARD ERROR	B	B	B	B	B	B	B	B	B	D	B
RHODE ISLAND	ESTIMATED POPULATION	358	263	277	45	459	232	108	269	261	0	266
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
RHODE ISLAND	ESTIMATED POPULATION	63.0	46.3	48.8	7.8	80.7	40.8	19.0	47.4	45.9	0.0	46.8
	% STANDARD ERROR	B	B	B	B	B	B	B	B	B	A	B

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO	A	B
0 %	10 %		
10 %	20 %		
20 %	30 %		
30 %			

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
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1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
SOUTH CAROLINA												
	ESTIMATED POPULATION	635	904	981	364	1272	485	616	1052	867	3	765
% STANDARD ERROR	D	C	C	D	C	D	D	C	C	C	D	C
ESTIMATED % OF STATE	34.0	48.4	52.5	19.5	68.1	25.9	33.0	60.1	56.3	46.4	0.2	41.0
SOUTH DAKOTA												
ESTIMATED POPULATION	805	400	501	449	626	127	1021	454	379	427	0	1137
% STANDARD ERROR	D	D	D	D	D	D	C	D	D	D	A	C
ESTIMATED % OF STATE	46.4	23.1	28.9	25.9	36.1	7.3	58.9	26.2	21.9	24.7	0.0	65.6
TENNESSEE												
ESTIMATED POPULATION	1227	1919	2071	466	2396	1574	1039	2131	1984	1892	28	1304
% STANDARD ERROR	C	B	B	D	B	C	C	B	B	B	D	C
ESTIMATED % OF STATE	36.8	57.6	62.1	14.0	71.9	47.2	31.2	63.9	59.5	56.8	0.8	39.1
TEXAS												
ESTIMATED POPULATION	9352	11518	13596	3835	16203	9246	7422	14126	12658	11930	57	9370
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF STATE	39.3	48.4	57.1	16.1	68.1	38.8	31.2	59.3	53.2	50.1	0.2	39.4
UTAH												
ESTIMATED POPULATION	764	795	730	180	1029	550	651	723	709	649	0	953
% STANDARD ERROR	D	C	D	D	C	D	D	D	D	D	A	C
ESTIMATED % OF STATE	47.0	48.9	44.9	11.1	63.3	33.8	40.0	44.5	43.6	39.9	0.0	58.6

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE OF BASED AIRCRAFT
1983

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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
VERMONT												
	ESTIMATED POPULATION % STANDARD ERROR	327 D 45.8	328 D 45.9	242 D 33.9	84 D 11.8	509 D 71.3	283 D 39.7	222 D 31.1	349 D 48.9	180 D 25.3	169 D 23.6	0 A 0.0
VIRGINIA												
	ESTIMATED POPULATION % STANDARD ERROR	1440 C 43.9	1503 C 45.8	1693 C 51.6	411 D 12.5	2357 B 71.8	725 D 22.1	802 C 24.5	1797 C 54.8	1451 C 44.2	1392 C 42.4	6 D 0.2
WASHINGTON												
	ESTIMATED POPULATION % STANDARD ERROR	4300 B 57.0	2367 B 31.4	3114 B 41.2	1347 C 17.8	4300 B 57.0	1323 C 17.5	3371 B 44.7	2937 B 38.9	2910 B 38.5	2465 B 32.6	0 A 0.0
WEST VIRGINIA												
	ESTIMATED POPULATION % STANDARD ERROR	626 D 43.4	852 C 59.1	907 C 62.9	129 D 8.9	1115 C 77.3	614 D 42.6	361 D 25.1	971 C 67.4	912 C 63.3	821 C 57.0	3 D 0.2
WISCONSIN												
	ESTIMATED POPULATION % STANDARD ERROR	2317 B 45.4	1749 B 34.3	2027 B 39.8	1109 C 21.7	2744 B 53.8	966 C 18.9	2245 B 44.0	2344 B 46.0	2070 B 40.6	1578 C 30.9	155 D 3.0

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	---
OR	
EQUAL TO	

0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
WYOMING	553	717	545	101	809	469	485	656	615	530	2	567
	D	D	D	D	C	D	D	D	D	D	D	D
	40.5	52.5	39.9	7.4	59.2	34.3	35.5	48.1	45.1	38.8	0.2	41.6
PUERTO RICO	132	294	293	32	327	45	95	307	286	286	0	114
	D	D	D	D	D	D	D	D	D	D	A	D
	31.9	70.7	70.7	7.7	78.8	10.9	22.8	74.1	68.8	68.8	0.0	27.6
OTHER U.S. TERRITORIES	55	147	138	20	155	42	50	155	141	135	72	47
	D	D	D	D	D	D	D	D	D	D	D	D
	27.5	73.8	69.4	9.9	78.0	20.9	24.9	77.7	71.1	68.1	38.0	23.7
FOREIGN	310	899	1073	8	1093	704	108	1019	1019	1001	6	172
	D	C	C	D	C	C	D	C	C	C	D	D
	29.3	85.0	101.5	0.8	103.3	66.6	10.2	96.4	96.4	94.7	0.6	16.3
TOTAL	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
ESTIMATED POPULATION	A	A	A	A	A	A	A	A	A	A	C	A
% STANDARD ERROR	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4	43.9
ESTIMATED % OF POP												

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*****	STANDARD ERROR	CODE	*****
*	-----	----	*
*	GREATER	LESS THAN	*
*	THAN	OR	*
*	EQUAL TO		*
*	-----		*
*	0 %	10 %	*
*			*
*	10 %	20 %	*
*			*
*	20 %	30 %	*
*			*
*	30 %		*
*			*
*			*
*****			*****

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
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STATE		NAVIGATION EQUIPMENT										FLTMGT	NO
		VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	COMPTR	NAVEQ	
ALABAMA	ESTIMATED POPULATION	916	1571	1730	1636	944	487	184	652	258	32	799	
	% STANDARD ERROR	C	C	B	C	C	D	D	D	D	D	C	
	ESTIMATED % OF STATE	30.7	52.6	57.9	54.8	31.6	16.3	6.2	21.8	8.6	1.1	26.8	
ALASKA	ESTIMATED POPULATION	3542	2412	1958	3659	1214	209	119	264	177	0	1484	
	% STANDARD ERROR	B	B	B	B	C	D	D	D	D	A	B	
	ESTIMATED % OF STATE	46.7	31.8	25.8	48.2	18.0	2.8	1.6	3.5	2.3	0.0	19.6	
ARIZONA	ESTIMATED POPULATION	1194	3600	3313	3056	1977	550	84	529	192	1	1201	
	% STANDARD ERROR	C	B	B	B	B	D	D	D	D	D	C	
	ESTIMATED % OF STATE	18.7	56.4	51.9	47.9	31.0	8.6	1.3	8.3	3.0	0.0	18.8	
ARKANSAS	ESTIMATED POPULATION	624	1511	1415	1276	955	335	40	267	144	108	858	
	% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D	C	
	ESTIMATED % OF STATE	20.2	48.9	45.8	41.3	30.9	10.9	1.3	8.6	4.7	3.4	27.8	
CALIFORNIA	ESTIMATED POPULATION	10611	19247	19479	16879	10609	3266	1001	2656	1830	406	6673	
	% STANDARD ERROR	A	A	A	A	A	B	C	B	B	D	A	
	ESTIMATED % OF STATE	30.5	55.3	55.9	48.5	30.5	9.4	2.9	7.6	5.3	1.2	19.2	

STANDARD ERROR	CODE
GREATER THAN	
LESS THAN	
OR	
EQUAL TO	
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
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STATE	NAVIGATION EQUIPMENT										FLTMGT COMPT	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
COLORADO												
ESTIMATED POPULATION	2200	2032	2616	2666	1649	644	139	467	324	184	1449	
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	C	
ESTIMATED % OF STATE	40.4	37.3	48.1	49.0	30.3	11.8	2.6	8.6	6.0	3.0	26.6	
CONNECTICUT												
ESTIMATED POPULATION	569	741	960	822	423	166	31	154	161	0	465	
% STANDARD ERROR	D	D	C	C	D	D	D	D	D	A	D	
ESTIMATED % OF STATE	30.1	39.1	50.7	43.4	22.4	8.8	1.6	8.1	8.5	0.0	24.6	
DELAWARE												
ESTIMATED POPULATION	207	559	629	654	516	161	68	121	74	1	86	
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D	
ESTIMATED % OF STATE	23.9	64.4	72.4	75.4	59.4	18.5	7.8	13.9	8.5	0.2	9.9	
DC												
ESTIMATED POPULATION	0	60	57	59	56	55	52	54	53	0	1	
% STANDARD ERROR	A	D	D	D	D	D	D	D	D	A	D	
ESTIMATED % OF STATE	0.0	99.8	95.7	97.9	93.8	92.0	86.2	89.9	88.0	0.0	2.0	
FLORIDA												
ESTIMATED POPULATION	4826	8182	8047	7916	5766	1694	516	1473	1248	236	2384	
% STANDARD ERROR	B	A	A	A	B	B	D	C	C	D	B	
ESTIMATED % OF STATE	32.7	55.5	54.6	53.7	39.1	11.5	3.5	10.0	8.5	1.6	16.2	

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN OR EQUAL TO	---
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
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STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT CMPTR	NO NAVEQ
GEORGIA	ESTIMATED POPULATION	1681	3233	3073	2055	476	330	803	435	42	1007
	% STANDARD ERROR	C	B	B	B	D	D	C	D	D	C
	ESTIMATED % OF STATE	29.8	57.2	54.4	36.4	8.4	5.8	10.7	7.7	0.7	17.8
HAWAII	ESTIMATED POPULATION	235	205	189	73	8	10	7	8	0	114
	% STANDARD ERROR	D	D	D	D	D	D	D	D	A	D
	ESTIMATED % OF STATE	40.3	35.1	32.4	12.4	1.4	1.7	1.2	1.4	0.0	19.5
IDAHO	ESTIMATED POPULATION	828	1164	981	606	267	33	167	157	18	618
	% STANDARD ERROR	C	C	C	D	D	D	D	D	D	D
	ESTIMATED % OF STATE	31.0	43.6	36.7	22.7	10.0	1.3	6.3	5.9	0.7	23.1
ILLINOIS	ESTIMATED POPULATION	2845	5166	5009	3601	1049	228	989	920	129	1851
	% STANDARD ERROR	B	B	B	B	C	D	C	C	D	B
	ESTIMATED % OF STATE	28.1	55.0	63.9	38.3	11.2	2.4	10.3	9.8	1.4	19.7
INDIANA	ESTIMATED POPULATION	1344	2740	2719	1842	541	176	451	494	69	754
	% STANDARD ERROR	C	B	B	B	D	D	D	D	D	C
	ESTIMATED % OF STATE	28.4	57.9	57.5	38.9	11.4	3.7	9.5	10.4	1.5	15.9

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
IOWA	ESTIMATED POPULATION	1492	1781	1925	2040	1156	222	123	128	246	8
	% STANDARD ERROR	C	C	B	B	C	D	D	D	D	C
	ESTIMATED % OF STATE	38.5	46.0	49.7	52.7	29.8	5.7	3.2	6.4	0.2	24.2
KANSAS	ESTIMATED POPULATION	1382	2694	2743	2869	1586	611	77	491	195	0
	% STANDARD ERROR	C	B	B	B	C	D	D	D	A	C
	ESTIMATED % OF STATE	27.4	53.4	54.3	52.8	31.4	12.1	1.5	9.7	3.9	18.6
KENTUCKY	ESTIMATED POPULATION	682	1220	1053	1132	804	339	146	334	365	46
	% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D
	ESTIMATED % OF STATE	32.4	57.9	50.0	53.7	38.2	16.1	6.9	15.9	17.3	2.2
LOUISIANA	ESTIMATED POPULATION	984	2362	2129	2839	1812	663	668	456	237	3
	% STANDARD ERROR	C	B	B	B	B	D	D	D	D	C
	ESTIMATED % OF STATE	21.9	52.6	47.4	63.2	40.3	14.8	14.8	10.1	5.3	0.1
MAINE	ESTIMATED POPULATION	430	596	483	528	320	126	42	105	64	98
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D
	ESTIMATED % OF STATE	30.5	42.2	34.2	37.4	22.6	8.9	3.0	7.4	4.5	6.9

*	STANDARD ERROR	*	CODE	*
*	-----	*	----	*
*	GREATER	*	LESS THAN	*
*	THAN	*	OR	*
*	-----	*	EQUAL TO	*
*	0 %	*	10 %	*
*	10 %	*	20 %	*
*	20 %	*	30 %	*
*	30 %	*		*
*		*	A	*
*		*	B	*
*		*	C	*
*		*	D	*

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STATE	NAVIGATION EQUIPMENT										FLTMGT COMPT	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
MARYLAND	ESTIMATED POPULATION	1387	1670	2128	1833	1477	282	158	342	353	6	683
	% STANDARD ERROR	C	C	B	B	C	D	D	D	D	D	D
MASSACHUSETTS	ESTIMATED POPULATION	1032	2019	1807	1597	829	333	84	248	352	51	613
	% STANDARD ERROR	C	B	C	C	C	D	D	D	D	D	D
MICHIGAN	ESTIMATED POPULATION	2833	4201	4129	3717	2661	1213	283	883	778	198	2005
	% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
MINNESOTA	ESTIMATED POPULATION	1960	2382	2381	2494	1221	585	142	412	342	98	1711
	% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	B
MISSISSIPPI	ESTIMATED POPULATION	748	1506	1422	1545	1021	443	4	153	153	21	677
	% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D	D
	ESTIMATED % OF STATE	25.6	51.6	48.7	52.9	35.0	15.2	0.2	5.2	5.2	0.7	23.2

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	*
OR	*
EQUAL TO	*
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT										NO NAVEG
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPT	
MISSOURI	ESTIMATED POPULATION	1947	2044	2214	2122	1326	472	133	275	329	118
	% STANDARD ERROR	B	B	B	B	C	D	D	D	D	C
	ESTIMATED % OF STATE	41.0	43.0	46.6	44.7	27.9	9.9	2.8	5.8	6.9	17.4
MONTANA	ESTIMATED POPULATION	1257	1289	1355	1849	647	139	5	131	160	681
	% STANDARD ERROR	C	C	C	C	D	D	D	D	D	D
	ESTIMATED % OF STATE	41.4	42.5	44.7	81.0	21.3	4.6	0.2	4.3	5.3	22.5
NEBRASKA	ESTIMATED POPULATION	476	532	339	557	298	188	0	89	137	48
	% STANDARD ERROR	D	D	D	D	D	D	A	D	D	D
	ESTIMATED % OF STATE	36.3	40.6	25.9	42.5	22.8	14.4	0.0	6.8	10.5	26.8
NEVADA	ESTIMATED POPULATION	788	1576	1724	1766	1499	439	230	368	271	122
	% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D
	ESTIMATED % OF STATE	28.4	58.4	63.9	65.4	55.5	16.3	8.5	13.6	10.0	4.5
NEW HAMPSHIRE	ESTIMATED POPULATION	580	814	896	910	757	412	17	223	63	0
	% STANDARD ERROR	D	C	C	C	D	D	D	D	D	A
	ESTIMATED % OF STATE	35.1	49.3	54.2	55.0	45.8	24.9	1.0	13.5	3.8	0.0

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	*
OR	*
EQUAL TO	*
---	*
0 %	A
10 %	*
20 %	B
30 %	C
30 %	D

GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT											NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR		
NEW JERSEY	ESTIMATED POPULATION	1939	2374	2587	2212	1760	495	94	231	180	217	676
	% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	C
	ESTIMATED % OF STATE	42.1	51.5	56.2	48.0	38.2	10.7	2.0	5.0	3.9	4.7	14.7
NEW MEXICO	ESTIMATED POPULATION	606	1781	1359	1594	1100	344	4	72	61	0	454
	% STANDARD ERROR	D	C	C	C	C	D	D	D	D	A	D
	ESTIMATED % OF STATE	21.0	60.9	47.0	55.1	38.0	11.9	0.1	2.5	2.1	0.0	15.7
NEW YORK	ESTIMATED POPULATION	2895	3512	3890	3569	2060	1033	363	749	595	131	1834
	% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
	ESTIMATED % OF STATE	36.8	44.7	49.5	45.4	26.2	13.1	4.6	9.5	7.6	1.7	23.3
NORTH CAROLINA	ESTIMATED POPULATION	1707	2749	3119	2753	1772	782	135	754	595	133	903
	% STANDARD ERROR	C	B	B	B	B	C	D	C	C	D	C
	ESTIMATED % OF STATE	34.0	54.8	62.2	54.3	35.3	15.6	2.7	15.0	11.9	2.6	18.0
NORTH DAKOTA	ESTIMATED POPULATION	838	515	737	847	478	142	4	91	89	1	556
	% STANDARD ERROR	C	D	D	C	D	D	D	D	D	D	D
	ESTIMATED % OF STATE	44.4	27.3	39.0	44.9	25.3	7.5	0.2	4.8	4.7	0.1	29.4

STANDARD ERROR	CODE
GREATER THAN	
LESS THAN OR EQUAL TO	
0 %	A
10 %	B
20 %	C
30 %	D

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STATE	NAVIGATION EQUIPMENT										FLTMGT COMPTD	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
OHIO												
ESTIMATED POPULATION	3038	4412	5272	4478	2421	986	263	1030	866	194	2239	
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B	
ESTIMATED % OF STATE	34.0	49.3	59.0	50.1	27.1	11.0	2.9	11.5	9.7	2.2	25.0	
OKLAHOMA												
ESTIMATED POPULATION	1865	3589	3289	3168	2181	1100	170	813	664	95	995	
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	C	
ESTIMATED % OF STATE	29.5	56.8	52.0	50.1	34.5	17.4	2.7	9.7	10.5	1.5	15.7	
OREGON												
ESTIMATED POPULATION	2809	2037	2822	2855	1918	494	213	407	283	100	844	
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	C	
ESTIMATED % OF STATE	49.0	35.5	49.2	49.8	33.4	8.8	3.7	7.1	4.9	1.7	14.7	
PENNSYLVANIA												
ESTIMATED POPULATION	1751	4142	4143	3964	2876	1381	273	993	883	189	1601	
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B	
ESTIMATED % OF STATE	23.1	54.8	54.8	52.4	38.0	18.3	3.6	13.1	11.7	2.5	21.2	
RHODE ISLAND												
ESTIMATED POPULATION	330	270	279	274	119	66	7	39	27	3	57	
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D	
ESTIMATED % OF STATE	58.2	47.5	49.2	48.3	20.9	11.6	1.2	6.9	4.8	0.5	10.0	

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	*
OR	*
EQUAL TO	*
---	*
0 %	A
10 %	*
20 %	B
30 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
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STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
SOUTH CAROLINA	ESTIMATED POPULATION	562	995	1069	1255	694	338	26	183	25	397
	% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D
	ESTIMATED % OF STATE	30.1	53.3	57.2	67.2	37.2	18.1	1.4	9.8	1.3	21.2
SOUTH DAKOTA	ESTIMATED POPULATION	591	458	492	566	191	91	71	5	2	543
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D
	ESTIMATED % OF STATE	34.1	26.4	28.4	32.6	11.0	5.2	4.1	0.3	0.1	31.3
TENNESSEE	ESTIMATED POPULATION	1164	1722	2098	1989	1684	1065	323	648	80	483
	% STANDARD ERROR	C	B	B	B	B	C	D	C	D	D
	ESTIMATED % OF STATE	34.9	51.7	63.0	59.7	50.5	31.9	9.7	19.4	2.4	14.5
TEXAS	ESTIMATED POPULATION	6810	13066	13969	13711	9580	4399	1326	3085	947	4554
	% STANDARD ERROR	A	A	A	A	A	B	C	B	C	B
	ESTIMATED % OF STATE	28.6	54.9	58.7	57.6	40.2	18.5	5.6	13.0	4.0	19.1
UTAH	ESTIMATED POPULATION	540	882	667	666	434	125	31	60	3	332
	% STANDARD ERROR	D	C	D	D	D	D	D	D	D	D
	ESTIMATED % OF STATE	33.2	53.0	41.0	40.9	26.7	7.7	1.9	3.7	0.2	20.4

*****		*****	
STANDARD ERROR	CODE	STANDARD ERROR	CODE
GREATER THAN	---	GREATER THAN	---
LESS THAN	---	LESS THAN	---
OR	---	OR	---
EQUAL TO	---	EQUAL TO	---
0 %	A	0 %	A
10 %	B	10 %	B
20 %	C	20 %	C
30 %	D	30 %	D
*****	*****	*****	*****

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
VERMONT											
ESTIMATED POPULATION	251	353	250	273	219	45	6	5	6	0	121
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	35.2	49.5	35.1	38.2	30.6	6.3	0.9	0.7	0.9	0.0	16.9
VIRGINIA											
ESTIMATED POPULATION	1177	1701	1634	1478	1015	244	58	27	105	60	531
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	35.9	51.8	49.8	45.0	30.9	7.4	1.8	0.8	3.2	1.8	16.2
WASHINGTON											
ESTIMATED POPULATION	2821	2909	3004	2753	1293	267	189	326	192	40	2113
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	B
ESTIMATED % OF STATE	37.4	38.5	39.8	36.5	17.1	3.5	2.5	4.3	2.5	0.5	28.0
WEST VIRGINIA											
ESTIMATED POPULATION	468	927	908	964	612	258	41	259	142	67	126
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	32.5	64.3	63.0	68.9	42.5	17.9	2.8	18.0	9.9	4.6	8.7
WISCONSIN											
ESTIMATED POPULATION	1555	2378	1928	1975	1201	451	38	361	178	2	1269
% STANDARD ERROR	C	B	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	30.5	48.6	37.8	38.7	23.6	8.8	0.8	7.1	3.5	0.0	24.9

*****	STANDARD ERROR	CODE	*****
*	-----	----	*
*	GREATER	LESS THAN	*
*	THAN	OR	*
*	-----	EQUAL TO	*
*	0 %	10 %	*
*	10 %	20 %	*
*	20 %	30 %	*
*	30 %		*
*		A	*
*		B	*
*		C	*
*		D	*
*****			*****

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GENERAL AVIATION AVIONICS EQUIPMENT
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REGION OF BASED AIRCRAFT
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REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
ALASKAN												
ESTIMATED POPULATION	4364	2520	2159	934	2877	580	4688	2474	2141	1975	0	4854
% STANDARD ERROR	B	B	B	C	B	D	B	B	B	B	A	B
ESTIMATED % OF REGION	57.5	33.2	28.5	12.3	37.9	7.6	61.8	32.6	28.2	26.0	0.0	64.0
CENTRAL												
ESTIMATED POPULATION	6599	6668	7252	2627	8765	3712	6034	7696	6859	5885	92	6482
% STANDARD ERROR	B	B	A	B	A	B	B	A	B	B	D	A
ESTIMATED % OF REGION	44.0	44.5	48.4	17.5	58.5	24.8	40.3	51.4	45.8	39.3	0.6	43.3
EASTERN												
ESTIMATED POPULATION	13157	13757	14799	4071	19122	10744	9787	16386	15057	13672	193	12204
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	45.1	47.1	50.7	13.9	65.5	36.8	33.5	56.1	51.6	46.8	0.7	41.8
EUROPEAN OFFICE												
ESTIMATED POPULATION	154	496	617	4	617	442	25	613	613	613	2	29
% STANDARD ERROR	D	D	C	D	C	D	D	C	C	C	D	D
ESTIMATED % OF REGION	28.4	91.3	113.7	0.7	113.6	81.3	4.6	112.7	112.7	112.7	0.4	5.4
GREAT LAKES												
ESTIMATED POPULATION	21112	19779	23055	8614	27615	12948	18900	23232	21664	18385	324	22051
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	45.6	42.8	49.8	18.6	59.7	28.0	40.9	50.2	46.8	39.8	0.7	47.7
NEW ENGLAND												
ESTIMATED POPULATION	4195	4186	4667	1748	5803	3178	3732	5128	4587	3985	4	4285
% STANDARD ERROR	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED % OF REGION	43.8	43.7	48.7	18.2	60.6	33.2	39.0	53.5	47.9	41.6	0.0	44.7

*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	**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GENERAL AVIATION AVIONICS EQUIPMENT
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REGION	NAVIGATION EQUIPMENT										FLTMGT COMPTR	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
ALASKAN	3542	2412	1958	3659	1214	209	119	264	177	0	1484	
	B	B	B	B	C	D	D	D	D	A	B	
	46.7	31.8	25.8	48.2	16.0	2.8	1.6	3.5	2.3	0.0	19.6	
CENTRAL	5296	7051	7221	7387	4366	1492	333	981	907	175	3053	
	B	A	A	A	B	C	D	C	C	D	B	
	35.4	47.1	48.2	49.3	29.1	10.0	2.2	6.5	6.1	1.2	20.4	
EASTERN	9823	14945	15977	14733	10374	3908	1106	2775	2386	671	5537	
	A	A	A	A	A	B	C	B	B	D	A	
	33.6	51.2	54.7	50.5	35.5	13.4	3.8	9.5	8.2	2.3	19.0	
EUROPEAN OFFICE	19	620	414	622	490	113	174	173	214	53	16	
	D	C	D	C	D	D	D	D	D	D	D	
	3.4	114.1	76.2	114.4	90.1	20.7	31.9	31.8	39.4	9.7	2.9	
GREAT LAKES	14803	22233	23667	22162	13615	5057	1206	4272	3670	694	10928	
	A	A	A	A	A	B	C	B	B	C	A	
	32.0	48.1	51.2	47.9	29.4	10.9	2.6	9.2	7.9	1.5	23.6	
NEW ENGLAND	3193	4793	4676	4403	2666	1148	187	775	673	152	2026	
	B	B	B	B	B	C	D	C	D	D	B	
	33.3	50.0	48.8	46.0	27.8	12.0	2.0	8.1	7.0	1.6	21.2	

* STANDARD ERROR	* CODE
* -----	* ---
* GREATER	* LESS THAN
* THAN	* OR
* -----	* EQUAL TO
* 0 %	* 10 %
* 10 %	* 20 %
* 20 %	* 30 %
* 30 %	* A
* -----	* B
* -----	* C
* -----	* D

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GENERAL AVIATION AVIONICS EQUIPMENT
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REGION	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPT	NO NAVEQ
NORTHWEST MT.											
ESTIMATED POPULATION	10849	11112	12091	12531	6852	2098	616	1749	1275	408	6197
% STANDARD ERROR	A	A	A	A	A	B	C	B	C	D	A
ESTIMATED % OF REGION	39.5	40.5	44.1	45.7	25.0	7.6	2.2	6.4	4.6	1.5	22.6
SOUTHERN											
ESTIMATED POPULATION	12494	21711	22147	21944	15081	5697	1667	4727	3909	619	7078
% STANDARD ERROR	A	A	A	A	A	A	B	B	B	C	A
ESTIMATED % OF REGION	31.7	55.1	56.2	55.7	38.2	14.4	4.2	12.0	9.9	1.6	17.9
SOUTHWESTERN											
ESTIMATED POPULATION	10889	22388	22258	22682	15631	6841	2206	4840	4191	1152	7987
% STANDARD ERROR	A	A	A	A	A	A	B	B	B	C	A
ESTIMATED % OF REGION	26.8	55.0	54.7	55.7	38.4	16.8	5.4	11.9	10.3	2.8	19.6
WESTERN-PACIFIC											
ESTIMATED POPULATION	12826	24836	24891	22052	14345	4300	1473	3706	2484	676	8511
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	C	A
ESTIMATED % OF REGION	28.7	55.6	55.7	49.3	32.1	9.6	3.3	8.3	5.6	1.5	19.0
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
*	*	*	*	*	*	*	*	*	*	*	*
*	STANDARD ERROR	*	CODE	*	*	*	*	*	*	*	*
*	-----	*	-----	*	*	*	*	*	*	*	*
*	GREATER	*	LESS THAN	*	*	*	*	*	*	*	*
*	THAN	*	OR	*	*	*	*	*	*	*	*
*	-----	*	EQUAL TO	*	*	*	*	*	*	*	*
*	-----	*	-----	*	*	*	*	*	*	*	*
*	0 %	*	10 %	*	*	*	A	*	*	*	*
*	10 %	*	20 %	*	*	*	B	*	*	*	*
*	20 %	*	30 %	*	*	*	C	*	*	*	*
*	30 %	*		*	*	*	D	*	*	*	*
*	*****	*	*****	*	*	*	*****	*	*	*	*

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

[illegible]

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PAGE 2 OF 6

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
AERIAL OBSERVATION ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1845 B	2181 B	1929 B	415 D	2738 B	759 C	1572 B	2233 B	1718 B	1774 B	3 D	2065 B
	45.9	54.2	48.0	10.3	68.1	18.9	39.1	55.5	42.7	44.1	0.1	51.3
OTHER WORK USE ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1221 C	1145 C	407 D	254 D	1026 C	170 D	1490 B	338 D	290 D	213 D	4 D	2103 B
	51.0	47.9	17.0	10.6	42.9	7.1	62.3	14.1	12.1	8.9	0.2	87.9
COMMUTER AIR CARRIER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	149 D	1475 B	1174 B	6 D	1547 B	1283 B	38 D	1557 B	1547 B	1347 B	0 A	29 D
	10.0	99.7	79.4	0.4	104.6	86.7	2.6	105.2	104.6	91.0	0.0	1.9
AIR TAXI ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1373 B	6172 A	5510 A	17 D	6276 A	4758 B	985 C	5885 A	5529 A	5606 A	39 D	1377 B
	20.0	90.0	80.3	0.2	91.5	69.4	14.4	85.8	80.6	81.8	0.6	20.1
OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1750 B	3157 B	2565 B	728 C	3477 B	2025 B	1710 B	2616 B	2325 B	2099 B	17 D	2571 B
	36.5	65.9	53.5	15.2	72.6	42.3	35.7	54.6	48.5	43.8	0.3	53.7

***** STANDARD ERROR *****				***** CODE *****			
-----				-----			
GREATER				LESS THAN			
THAN				OR			
-----				EQUAL TO			
-----				-----			
0 %				10 %			
10 %				20 %			
20 %				30 %			
30 %				A			
				B			
				C			
				D			

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

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PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4098 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
RENTAL	2536	5314	5076	476	6444	3280	1593	6448	5892	5520	0	1585
	% STANDARD ERROR	B	B	D	B	B	C	B	B	B	A	B
	ESTIMATED % OF USE	33.1	69.2	66.1	6.2	84.0	42.7	20.8	84.0	76.8	71.9	0.0
INACTIVE	13305	5138	5850	19046	7682	2523	29286	7226	6368	4670	53	29293
	% STANDARD ERROR	A	A	A	A	B	A	A	A	A	D	A
	ESTIMATED % OF USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
	% STANDARD ERROR	A	A	A	A	A	A	A	A	A	C	A
	ESTIMATED % OF POP	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

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PRIMARY USE	NAVIGATION EQUIPMENT											
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ	
EXECUTIVE	ESTIMATED POPULATION	3153	14538	15631	16745	15256	9327	4241	9702	9160	1959	75
	% STANDARD ERROR	B	A	A	A	A	A	A	A	A	B	D
BUSINESS	ESTIMATED % OF USE	18.5	85.2	91.6	98.1	89.4	54.7	24.9	56.9	53.7	11.5	0.4
PERSONAL	ESTIMATED POPULATION	14557	33758	38758	39073	29540	11183	1749	7345	4855	1526	1386
	% STANDARD ERROR	A	A	A	A	A	A	B	A	B	B	C
INSTRUCTIONAL	ESTIMATED % OF USE	32.3	75.0	86.1	86.8	65.6	24.8	3.9	16.3	10.8	3.4	3.1
AERIAL APPLICATION	ESTIMATED POPULATION	43031	49963	52860	46642	23632	5060	1324	3123	2222	414	18558
	% STANDARD ERROR	A	A	A	A	A	B	C	B	B	D	A
	ESTIMATED % OF USE	42.4	49.2	52.1	46.0	23.3	5.0	1.3	3.1	2.2	0.4	18.3
	ESTIMATED POPULATION	5329	9707	6090	6422	2980	722	290	367	183	2	1446
	% STANDARD ERROR	B	A	B	B	B	C	D	D	D	D	B
	ESTIMATED % OF USE	34.5	62.8	39.4	41.6	19.3	4.7	1.9	2.4	1.2	0.0	9.4
	ESTIMATED POPULATION	317	295	346	468	155	51	2	29	6	0	6352
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	A
	ESTIMATED % OF USE	4.5	4.2	4.9	6.6	2.2	0.7	0.0	0.4	0.1	0.0	90.1

STANDARD ERROR	CODE
GREATER THAN	
LESS THAN	
OR	
EQUAL TO	
0 %	A
10 %	B
20 %	C
30 %	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

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PRIMARY USE	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	
AERIAL OBSERVATION ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1524 B	2075 B	1827 B	1721 B	827 C	187 D	245 D	36 D	125 D	0 A	752 C
	37.9	51.6	45.4	42.8	20.6	4.7	6.1	0.9	3.1	0.0	18.7
OTHER WORK USE ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	794 C	451 D	326 D	312 D	148 D	133 D	71 D	39 D	54 D	0 A	1273 C
	33.2	18.8	13.6	13.0	8.2	5.6	3.0	1.6	2.3	0.0	53.2
COMMUTER AIR CARRIER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	388 D	1228 B	1358 B	1545 B	1099 C	345 D	0 A	183 D	296 D	62 D	20 D
	26.2	83.0	91.8	104.4	74.3	23.3	0.0	12.4	20.0	4.2	1.4
AIR TAXI ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1013 C	5965 A	5348 A	8360 A	4834 B	2075 B	604 C	1703 B	1489 B	108 D	158 D
	14.8	87.0	78.0	92.7	70.5	30.3	8.8	24.8	21.7	1.6	2.3
OTHER ESTIMATED POPULATION % STANDARD ERROR ESTIMATED % OF USE	1247 C	2715 B	2197 B	2755 B	1852 B	572 C	419 D	877 C	815 C	173 D	1299 B
	28.0	56.7	45.9	57.5	38.7	11.9	8.8	18.3	17.0	3.6	27.1

STANDARD ERROR	CODE
GREATER THAN	---
LESS THAN	
OR	
EQUAL TO	
0 %	A
10 %	
20 %	B
30 %	C
	D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

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PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
RENTAL											
ESTIMATED POPULATION	2851	4989	5292	5515	2695	353	138	303	392	15	449
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	D
ESTIMATED % OF USE	37.2	65.0	69.0	71.9	35.1	4.6	1.8	4.0	5.1	0.2	5.9
INACTIVE											
ESTIMATED POPULATION	9093	8827	5779	5923	2817	840	327	571	478	34	21355
% STANDARD ERROR	A	A	A	A	B	C	D	B	C	D	A
ESTIMATED % OF USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

*****	STANDARD ERROR	CODE	*****
*****	LESS THAN	---	*****
*****	GREATER THAN	---	*****
*****	OR	---	*****
*****	EQUAL TO	---	*****
*****	0 %	10 %	*****
*****	10 %	20 %	*****
*****	20 %	30 %	*****
*****	30 %		*****
*****			*****

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
OTHER 01	6269.5	805.1	12.8
OTHER 02	3237.6	395.6	12.2
OTHER 03	1227.5	231.7	18.9
OTHER 04	647.0	507.4	78.4
OTHER 05	30.6	17.6	57.6
OTHER 06	1344.4	384.0	28.6
OTHER 07	1375.1	168.4	12.1
OTHER 08	321.7	54.4	16.9
OTHER 09	2859.5	387.4	13.5
OTHER 10	1254.7	212.5	16.9
OTHER 11	202.3	42.8	21.2
OTHER 12	1501.0	351.0	23.4
OTHER 13	1582.1	206.6	13.1
AERORSJ2	7.5	1.0	13.9
AGUSTAA109	14.3	4.0	28.1
AIRPTSA	542.3	52.2	9.6
AIRSPC18	9.9	2.1	21.3
AIRTRCAT300	671.8	122.3	18.2
AMD FALC10	136.7	50.4	36.9
AMD FALC20	471.4	68.3	14.5
AMD FALC50	45.4	15.5	34.1

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
AMTR TMK	15.9	5.9	37.1
ARCTICS1A	207.2	10.5	5.1
ARCTICS1B1	26.8	4.3	16.0
ARONCA15	367.5	20.2	5.5
ARONCA58	423.2	60.3	14.3
ARONCA65	288.0	31.8	11.0
ARONCAC3	91.2	5.3	5.8
AVIANW/FALCON	3.7	0.3	8.0
AYRES S2	2216.2	349.8	15.8
AYRES S2T	70.1	15.0	21.4
BAG B208	88.1	8.6	7.5
BALWKS/FIREFY	118.2	23.8	20.1
BEECH 17	369.0	13.6	3.7
BEECH 18	2211.1	203.8	9.2
BEECH 200	1225.8	184.1	15.0
BEECH 23	5054.2	344.1	6.8
BEECH 33	2780.1	362.5	13.0
BEECH 35	17395.2	897.1	5.2
BEECH 36	2103.1	315.0	15.0
BEECH 45	516.8	208.8	40.4
BEECH 50	1236.7	69.2	5.6
BEECH 55	4327.1	427.0	9.9

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GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY

AIRCRAFT MANUFACTURER/MODEL GROUP

1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
BEECH 58	1277.4	174.9	13.7
BEECH 60	653.4	103.0	15.8
BEECH 65	390.2	45.1	11.6
BEECH 77	169.2	29.0	17.1
BEECH 80	465.7	44.9	9.6
BEECH 90	2183.4	249.6	11.4
BEECH 95	1174.8	93.5	8.0
BELL 204	527.5	18.5	3.5
BELL 206	3948.3	359.0	9.1
BELL 222	51.7	7.8	15.1
BELL 47	4263.8	563.5	13.2
BLANCA11	1311.8	142.8	10.9
BLANCA1413	485.3	28.8	6.2
BLANCA1419	483.7	23.3	4.8
BLANCA17	1143.3	125.1	10.9
BLANCA7	9190.3	357.5	3.9
BLANCA8	548.3	112.0	20.4
BNORM BN2	68.7	46.2	67.3
BNORM BN2MK3	8.4	0.1	1.0
BOEING75	4526.5	924.6	20.4
BUKER 131	53.6	10.3	19.2
CAMRONMODELO	29.6	3.2	10.8

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
CESSNA120	2100.3	86.8	4.1
CESSNA140	4678.7	377.1	8.1
CESSNA150	42977.5	1399.9	3.3
CESSNA170	5538.4	288.1	5.2
CESSNA172	45204.8	1474.3	3.3
CESSNA175	2380.4	122.8	5.2
CESSNA177	4476.5	297.1	6.6
CESSNA180	5676.1	492.2	8.7
CESSNA182	23550.9	989.3	4.2
CESSNA185	1704.2	430.1	25.2
CESSNA188	3561.9	384.7	10.8
CESSNA205	545.4	105.8	19.4
CESSNA206	5383.9	514.2	9.6
CESSNA207	674.9	133.9	19.8
CESSNA210	8758.1	666.0	7.6
CESSNA305	514.3	7.0	1.4
CESSNA310	8102.8	438.4	5.4
CESSNA320	788.7	52.4	6.6
CESSNA335	27.4	3.3	12.1
CESSNA337	2065.1	196.9	9.5
CESSNA340	1556.3	165.6	10.6
CESSNA401	818.3	65.5	10.8

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
CESSNA402	908.0	213.5	23.5
CESSNA411	543.6	25.9	4.8
CESSNA414	1763.9	253.5	14.4
CESSNA421	2499.0	264.9	10.6
CESSNA425	63.7	9.9	15.6
CESSNA441	247.9	55.8	22.5
CESSNA500	1358.4	199.2	14.7
CESSNAT50	121.4	16.0	13.2
COMWTH185	167.6	5.3	3.1
CONAERLA4	185.4	50.3	27.1
CURTISTRVAIR	345.6	19.8	5.7
CVAC 240	30.7	0.0	0.0
CVAC BT13	265.8	8.0	3.0
CVAC P4Y	24.0	0.0	0.0
DHAV DHC1	238.1	13.4	5.6
DHAV DHC2	468.4	133.6	28.5
DHAVXXDH82	205.7	10.3	5.0
DOUG A28	72.8	5.1	7.0
DOUG DC3	328.7	159.0	48.4
EAGLE DW	14.1	7.3	51.6
EIRVON20	47.0	3.1	6.6
ENSTRNF28	262.0	49.0	18.7

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
FLEET 168	45.0	2.5	5.5
FRCHLD24	452.2	20.1	4.5
FRCHLDM62	354.9	12.5	3.5
GLASFLH301	100.3	6.9	6.9
GRUMAVAA1	877.4	117.9	13.4
GRUMAVAA5	454.7	110.7	24.3
GRUMAVG164	1302.2	233.8	18.0
GRUMAVTBM	73.9	4.0	5.4
GULSTM112	805.1	92.8	11.5
GULSTM500	1053.5	67.1	6.4
GULSTM680	1031.6	85.5	8.3
GULSTM680TP	411.1	25.2	6.1
GULSTM690TP	711.1	152.5	21.4
GULSTMAA1	738.8	148.0	20.0
GULSTMAA5	1967.0	172.4	8.8
GULSTMG1159	164.3	33.5	20.4
HELIO H391	34.1	2.9	8.6
HILLERFH1100	149.5	21.5	14.4
HILLERUH12	1471.7	124.8	8.5
HUGHES269	1295.7	118.7	9.0
HUGHES369	683.3	101.1	14.8
HWKSLYDH104	108.9	0.0	0.0

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
HWKSLYDH125	299.6	36.0	12.0
INTRCP200	57.3	3.8	6.6
ISRAEL1124	215.7	55.9	25.9
JBMSTRDGA15	120.1	8.1	6.8
LAIKFN10	17.6	1.7	9.7
LEAR 35	589.5	108.3	18.4
LKHEED1329	261.9	31.7	12.1
LKHEED18	84.1	32.2	38.2
LUSCOM8	4762.3	234.4	4.9
MAULE M5	206.4	22.3	10.8
MCLISHFUNKB	215.0	7.7	3.6
MNCUP90	81.0	6.6	8.2
MNMITEM18	218.6	23.1	10.6
MOONEYM20	10083.7	650.7	6.5
MTSBSIMU2	894.4	139.0	15.5
MULTECD16	93.5	7.3	7.8
NAMER F51	182.1	14.7	8.1
NAMER NA260	132.3	12.2	9.2
NAMER T6	1568.7	92.9	5.9
NAVIONNAVION	1217.4	256.4	21.1
NORD SV4	74.2	5.7	7.7
NORWST65	135.9	4.3	3.1

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
ORLHELH19	229.5	12.0	5.2
PICARDAX6	42.2	5.0	11.8
PIPER 600	192.1	20.1	10.5
PIPER J2	61.9	4.5	7.3
PIPER J3	7717.5	494.1	6.4
PIPER J4	431.6	37.1	8.6
PIPER J5	728.8	228.2	31.4
PIPER PA12	2595.6	288.1	11.1
PIPER PA15	285.8	42.5	14.9
PIPER PA16	629.0	53.6	8.5
PIPER PA17	182.4	10.5	5.7
PIPER PA18	6622.0	652.1	9.8
PIPER PA20	832.3	54.0	6.5
PIPER PA22	10280.7	486.2	4.7
PIPER PA23	9693.2	511.8	5.3
PIPER PA24	8531.4	363.3	4.3
PIPER PA25	3113.3	306.7	9.9
PIPER PA28	42284.4	1233.7	2.9
PIPER PA30	3709.6	238.8	6.4
PIPER PA31	4410.5	363.8	8.2
PIPER PA31T	875.3	128.1	14.6
PIPER PA32	6845.7	621.8	9.1

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GENERAL AVIATION LIFETIME AIRFRAME HOURS

BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
PIPER PA34	3156.1	279.1	8.8
PIPER PA36	589.1	102.1	17.3
PIPER PA38	1822.9	224.5	12.3
PIPER PA44	327.8	25.7	7.8
PROPT200	99.2	5.5	5.6
RAVEN S50	20.1	1.4	7.1
RAVEN S55	142.7	14.8	10.3
RKWE1700	23.2	3.8	16.2
"KWELLNA285	1119.5	107.4	9.6
ROBS1NR22	154.6	14.0	9.0
RYAN ST3	359.8	39.7	11.0
RYAN STA	51.9	5.8	11.2
SCHWZERG184	2123.0	501.6	23.6
SCHWZERSG1	626.8	61.1	9.7
SCHWZERSG2	1233.5	156.2	12.7
SENGO CLNGER	7.7	1.0	13.6
SKRSKYS55	111.0	6.1	5.5
SKRSKYS58	198.8	5.7	2.8
SMITH 800	402.9	106.1	26.3
SNIAS 350	166.6	48.6	29.2
STNSON10	301.2	14.3	4.7
STNSONL5	203.8	17.2	8.5

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
STNSOV77	149.7	12.2	8.1
STOLAMRC3	221.8	18.5	7.5
TCRAFKD	422.1	79.9	18.9
TCRAFTA	52.2	7.2	13.8
TCRAFTBC	3399.1	182.3	5.4
TCRAFTBL	453.0	22.7	5.0
THUNDRAX7	9.6	1.1	11.5
TMPSONNAVION	1704.2	158.6	9.2
TRYTEK65	734.4	40.1	5.5
UNIVACGC1	1043.1	129.7	12.4
UNIVAR108	3899.2	87.8	2.3
UNIVAR415	3827.0	222.1	5.8
VARGA 2150	122.2	14.5	11.9
WACO ASO	88.8	12.3	18.5
WACO UPF7	508.6	49.9	9.9
WACO YK	101.8	5.9	5.8
TOTAL AIRCRAFT	451220.5	4628.9	1.0

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP

PAGE 1 OF 2

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
AMTRMCMCULH	103	49.58	22.70	36	46.19
CONT 6285	163	0.00	100.00	68	23.12
CONT A40	18	92.83	12.67	18	13.22
CONT A65	5239	6.05	54.29	62	15.49
CONT A75	1374	11.86	65.53	46	23.46
CONT A80	28	40.40	36.86	44	14.15
CONT C125	283	19.86	67.86	57	33.37
CONT C145	1795	7.07	80.03	56	10.95
CONT C85	3615	7.83	59.23	55	11.37
CONT C90	1760	8.66	68.47	51	12.14
CONT E185	1713	7.34	83.17	70	11.27
CONT E225	1282	7.55	85.17	110	13.08
CONT 0200	13070	2.60	85.98	127	8.72
CONT 0300	8700	3.18	86.68	79	7.92
CONT 0360	3555	3.50	88.87	129	8.49
CONT 0470	24202	1.58	89.85	117	6.57
CONT 0520	28146	1.14	94.37	199	4.30
CONT R670	642	16.46	60.87	42	15.32
DHAVXXGIPSY	90	14.60	85.69	31	33.76
FCD 6440	144	8.33	42.15	36	9.75
FRKLN4AC176	151	13.45	82.76	54	53.01
FRKLN4AC199	28	26.49	17.85	21	12.75
FRKLN6A4150	526	5.51	51.57	42	7.41
FRKLN6A4165	691	7.81	61.02	59	14.07
FRKLN6A4200	15	39.34	60.81	24	15.64
FRKLN6A8215	84	9.96	41.45	46	17.38
FRKLN6AV335	107	10.10	95.66	70	10.26
FRKLN6AV350	64	110.87	28.54	175	12.42
FRKLN6VS335	25	57.05	37.97	38	19.41
FRKLN03356	163	14.11	88.04	157	23.41
GE CF700	404	0.00	100.00	273	16.08
GE CJ610	437	27.23	48.61	405	11.96
GE CT58	26	0.00	100.00	791	0.00
GLADENR5	40	75.80	21.47	28	22.67
JACOBPR755	418	6.85	99.01	238	52.79
JACOB5R755	184	30.16	49.45	48	51.74

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GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1983

PAGE 2 OF 2

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
JACOBSON 915	37	54.67	48.07	5	40.81
LYC 0540	7442	3.23	88.68	144	11.68
LYC LTS101	114	4.24	98.33	324	7.15
LYC 0145	327	19.31	39.14	36	12.25
LYC 0235	10166	3.24	83.35	282	8.99
LYC 0290	1867	11.49	57.15	48	13.49
LYC 0320	34956	1.52	87.65	166	5.21
LYC 0340	86	25.98	61.54	90	6.44
LYC 0360	25106	1.50	91.76	138	5.48
LYC 0435	635	16.82	40.80	196	22.94
LYC 0480	926	16.56	63.76	122	16.34
LYC 0540	13780	1.71	92.10	236	7.19
LYC 0541	1075	5.25	90.59	157	7.77
LYC 0720	200	6.55	79.38	280	6.33
LYC R680	392	19.63	59.97	67	29.53
LYC T53	43	14.10	83.33	204	28.25
MNASCOC4	2	216.47	8.73	24	11.79
ONAN B48	32622	2.47	70.67	310	4.62
PCKARDV1650	35	30.11	36.20	55	14.36
PWA JT12	252	27.53	53.53	351	9.11
PWA JT15	1000	0.00	100.00	392	12.70
PWA PT6	2796	1.78	97.76	448	10.21
PWA R1340	2063	6.00	88.46	260	11.30
PWA R1830	373	14.39	70.03	174	25.23
PWA R2000	26	31.38	16.57	33	29.17
PWA R2800	282	29.29	37.17	130	18.37
PWA R985	2190	7.52	57.98	234	12.29
RROYCEDART	436	0.00	100.00	440	8.39
ALL ENGINES	243314	0.14	81.97	182	1.73

NOTE: ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH
SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT
LISTED IN THE TABLE, BUT ARE INCLUDED IN THE
"ALL ENGINES" ESTIMATES.

TABLE 2 - 21

GENERAL AVIATION FUEL CONSUMPTION
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
FIXED WING			
PISTON			
1 ENG 1-3 SEATS	8.15	66.77	3.6
1 ENG 4+ SEATS	11.06	165.52	4.9
TOTAL 1 ENG	10.03	232.29	6.1
2 ENG 1-6 SEATS	26.91	81.09	5.4
2 ENG 7+ SEATS	35.77	97.17	8.8
TOTAL 2 ENG	31.11	178.26	10.3
OTHER PISTON	263.09	8.54	3.1
TOTAL PISTON	14.50	419.09	12.4
TURBOPROP			
2 ENG 1-12 SEATS	75.44	107.98	7.5
2 ENG 13+ SEATS	179.57	118.28	27.4
TOTAL 2 ENG	108.26	226.26	28.4
OTHER TURBOPROP	35.79	2.98	1.1
TOTAL TURBOPROP	105.48	229.24	28.4
TURBOJET			
2 ENG	211.05	284.83	24.2
OTHER	385.76	47.70	18.8
TOTAL TURBOJET	225.71	332.53	30.7
TOTAL FIXED WING	30.13	980.86	43.6
ROTORCRAFT			
PISTON	13.50	7.72	0.7
TURBINE	29.98	50.95	5.3
TOTAL ROTORCRAFT	25.83	58.67	5.4
OTHER	4.00	1.68	0.2
TOTAL AIRCRAFT	29.54	1041.21	43.9
TOTAL JET FUEL	114.61	612.72	42.1
TOTAL AVIATION GASOLINE	14.33	428.49	12.4

TABLE 2 - 22
GENERAL AVIATION MILES FLOWN
BY AIRCRAFT TYPE
NAUTICAL MILES (IN THOUSANDS)
1983

PAGE 1 OF 2

AIRCRAFT TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSR	WORK	COMM	TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS	1911	26082	214199	237692	123923	24558	23738	0	2919	5983	49800	710807
1 ENG: 4+ SEATS	43534	444992	590803	146053	11548	49925	11466	18300	71555	20513	141209	1549899
1 ENGINE: TOTAL	45448	471075	805003	383745	135471	74483	35205	18300	74475	26496	191009	2260706
2 ENG: 1-6 SEATS	75035	168331	35409	8909	2531	5576	74	31914	72012	4761	18034	422586
2 ENG: 7+ SEATS	134477	63623	3034	2171	1796	3667	1006	96473	74838	2395	5773	389255
2 ENG: TOTAL	209513	231954	38443	11080	4327	9243	1080	128388	146850	7156	23807	811840
PISTON OTHER	24	13	0	0	1001	6	506	1493	298	388	1966	5695
PISTON TOTAL	254982	703042	843446	394825	140798	83733	36791	148181	221622	34040	216782	3078241
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS	188577	36979	597	0	0	0	1872	0	36767	4419	1299	270511
2 ENG: 13+ SEATS	14653	0	38	0	0	0	0	135825	0	1477	0	151993
2 ENGINE: TOTAL	203231	36979	635	0	0	0	1872	135825	36767	5895	1299	422504
TURBOPROP: OTHER	164	0	23	0	14485	202	0	154	76	347	0	15452
TURBOPROP: TOTAL	203395	36979	658	0	14485	202	1872	135979	36843	6243	1299	437956

TABLE 2 - 22
GENERAL AVIATION MILES FLOWN
BY AIRCRAFT TYPE
NAUTICAL MILES (IN THOUSANDS)
1983

PAGE 2 OF 2

AIRCRAFT TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSER	WORK	COMM	TAXI	OTHER	RENTAL	TOTAL
FIXED WING - TURBOJET												
2 ENGINE TURBOJET	455334	39011	6994	0	0	0	0	0	9022	519	0	510880
TURBOJET: OTHER	38327	1733	6157	0	0	0	0	0	0	128	0	46344
TURBOJET: TOTAL	493661	40743	13151	0	0	0	0	0	9022	647	0	557224
FIXED WING: TOTAL	952038	780765	857254	394825	155283	83935	38663	284160	267487	40930	218081	4073421
ROTORCRAFT:												
PISTON	198	1738	1350	5050	12163	8523	2016	9	320	1277	179	32822
TURBINE	79789	3561	151	5460	699	3972	16875	429	23176	8260	0	142372
ROTORCRAFT: TOTAL	79987	5299	1501	10510	12862	12495	18890	437	23496	9536	179	175194
OTHER	122	13	8422	2416	0	0	0	0	0	340	1026	12339
TOTAL	1032148	786077	867177	407750	168145	96430	57554	284598	290984	50806	219286	4260954

TABLE 2-23

NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS

1983										PAGE 1 OF 2	
	1	2	3	4	5	6	7	8	TOTALS		
L	ESTIMATE	90	220	3902	9190	0	1667	603	15681		
	% STD ERR	*	49.5	11.8	8.3	0.0	19.8	32.7	6.1		
	ROW %	0.6	1.4	24.9	58.6	0.0	10.6	3.8			
	COLUMN %	0.2	1.4	9.8	11.8	0.0	9.6	0.9	6.0		
L, MB	ESTIMATE	219	32	1405	7999	0	948	1264	11868		
	% STD ERR	*	*	21.0	8.9	0.0	23.5	21.0	7.1		
	ROW %	1.8	0.3	11.8	67.4	0.0	8.0	10.7			
	COLUMN %	0.5	0.2	3.5	10.3	0.0	5.5	1.9	4.6		
L, MB, GS, RA	ESTIMATE	247	181	1008	32948	266	11464	46633	93332		
	% STD ERR	*	*	22.1	4.0	48.6	7.1	3.0	1.7		
	ROW %	0.3	0.2	1.1	35.3	0.3	12.3	50.0			
	COLUMN %	0.6	1.2	2.5	42.3	52.2	66.3	69.4	35.8		
L, MB, GS, RA, LRN	ESTIMATE	0	0	33	832	77	442	17741	19217		
	% STD ERR	0.0	0.0	*	26.3	*	38.4	4.0	3.9		
	ROW %	0.0	0.0	0.2	4.3	0.4	2.3	92.3			
	COLUMN %	0.0	0.0	0.1	1.1	15.1	2.6	26.4	7.4		
LRN	ESTIMATE	0	322	419	1737	9	579	6293	9393		
	% STD ERR	0.0	43.4	37.6	19.3	*	32.4	7.5	6.7		
	ROW %	0.0	3.4	4.5	18.5	0.1	6.2	67.0			
	COLUMN %	0.0	2.1	1.0	2.2	1.8	3.3	9.4	3.6		
RA	ESTIMATE	7	63	74	946	77	569	18120	19373		
	% STD ERR	*	*	44.3	24.5	*	34.2	3.9	3.8		
	ROW %	0.0	0.3	0.4	4.7	0.4	2.8	90.7			
	COLUMN %	0.0	0.4	0.2	1.2	15.1	3.3	27.0	7.7		
ML	ESTIMATE	0	7	65	408	0	4	556	1041		
	% STD ERR	0.0	*	*	41.7	0.0	*	31.6	24.3		
	ROW %	0.0	0.7	6.2	39.2	0.0	0.4	53.4			
	COLUMN %	0.0	0.0	0.2	0.5	0.0	0.0	0.8	0.4		
L, MB, GS, ML	ESTIMATE	0	0	2	328	0	4	525	860		
	% STD ERR	0.0	0.0	*	46.2	0.0	*	32.8	26.6		
	ROW %	0.0	0.0	0.2	38.1	0.0	0.5	61.0			
	COLUMN %	0.0	0.0	0.0	0.4	0.0	0.0	0.8	0.3		

TABLE 2-23

NON HIERARCHICAL VS HIERARCHICAL CAPABILITY GROUPS
(CONTINUED)

LRN, ML	1	2	3	4	5	6	7	8	TOTALS	PAGE 2 OF 2	
NO GROUP	ESTIMATE	0	0	86	0	0	0	386	474		
	% STD ERR	0.0	0.0	*	0.0	0.0	0.0	36.1	33.2		
	ROW %	0.0	0.4	18.1	0.0	0.0	0.0	81.4	0.2		
	COLUMN %	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.2		
ALL CRAFT	ESTIMATE	40764	14428	26515	166	329	2644	822	118857		
	% STD ERR	2.9	5.5	4.7	*	40.6	15.8	28.7	1.3		
	ROW %	34.3	12.1	22.3	0.1	0.3	2.2	0.7	45.6		
	COLUMN %	98.6	94.6	34.0	32.5	31.6	15.3	1.2	260505		
ALL CRAFT	ESTIMATE	41326	15250	77943	510	1041	17295	67181	260505		
	% STD ERR	2.9	5.3	2.3	34.5	23.4	5.7	2.1	25.8		
	ROW %	15.9	5.9	29.9	0.2	0.4	6.6	2.1	25.8		
	COLUMN %										

KEY

GROUP		GROUP		GROUP	
1. NO REGULATORY AVIONICS		4. TWO-WAY COMMUNICATIONS		7. TWO-WAY COMMUNICATIONS	
2. TWO-WAY COMMUNICATIONS		TWO SYSTEMS - AIR TAXIS		TWO SYSTEMS - AIR TAXIS	
3. TWO-WAY COMMUNICATIONS		4096 CODE TRANSPONDER		4096 CODE TRANSPONDER	
TWO SYSTEMS - AIR TAXIS		VOR OR RNAV		ALTITUDE ENCODING EQUIPMENT	
VOR OR ADF OR RNAV					
		5. 4096 CODE TRANSPONDER		8. TWO-WAY COMMUNICATIONS	
		ALTITUDE ENCODING EQUIPMENT		TWO SYSTEMS - AIR TAXIS	
				ALTITUDE ENCODING EQUIPMENT	
		6. TWO-WAY COMMUNICATIONS		4096 CODE TRANSPONDER	
		4096 CODE TRANSPONDER		VOR OR RNAV	
		ALTITUDE ENCODING EQUIPMENT		DME	
		GROUP		GROUP	
		L: LOCALIZER		RA: RADAR ALTIMETER	
		MB: MARKER BEACON		LRN: LONG RANGE RNAV	
		GS: GLIDE SLOPE		ML: MICROWAVE LANDING SYSTEM	

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-24
HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP

		1983								PAGE 1 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
EXECUTIVE	ESTIMATE	104	68	521	1334	160	23	1097	14280	17587	
	% STD ERR	*	*	35.8	20.7	*	*	21.5	4.6	4.3	
	ROW %	0.6	0.4	3.0	7.6	0.9	0.1	6.2	81.2		
	COLUMN %	0.3	0.4	1.3	1.7	31.4	2.2	6.3	21.3	6.8	
BUSINESS	ESTIMATE	1136	282	2654	14606	145	204	3458	24219	46705	
	% STD ERR	23.0	33.7	14.9	6.4	*	*	13.2	4.5	3.1	
	ROW %	2.4	0.6	5.7	31.3	0.3	0.4	7.4	51.9		
	COLUMN %	2.7	1.8	6.6	18.7	28.4	19.6	20.0	36.1	17.9	
PERSONAL	ESTIMATE	12495	6607	22353	41808	131	217	7088	16163	106861	
	% STD ERR	5.8	8.2	4.7	3.5	*	*	9.4	6.0	1.6	
	ROW %	11.7	6.2	20.9	39.1	0.1	0.2	6.6	15.1		
	COLUMN %	30.2	43.3	55.9	53.6	25.7	20.8	41.0	24.1	41.0	
INSTRUCT.	ESTIMATE	895	637	3457	7492	0	135	1818	1994	16429	
	% STD ERR	23.2	26.0	13.8	9.6	0.0	*	19.8	18.1	6.1	
	ROW %	5.4	3.9	21.0	45.6	0.0	0.8	11.1	12.1		
	COLUMN %	2.2	4.2	8.7	9.6	0.0	13.0	10.5	3.0	6.3	
AERIAL AP.	ESTIMATE	5390	964	159	280	0	2	27	150	6972	
	% STD ERR	10.8	22.6	*	45.2	0.0	*	31.5	*	9.1	
	ROW %	77.3	13.8	2.3	4.0	0.0	0.0	0.4	2.2		
	COLUMN %	13.0	6.3	0.4	0.4	0.0	0.2	0.2	0.2	2.7	
AERIAL OBS	ESTIMATE	414	562	942	1630	0	19	257	482	4307	
	% STD ERR	33.6	26.0	25.1	20.0	0.0	*	47.0	33.4	11.4	
	ROW %	9.6	13.0	21.9	37.8	0.0	0.4	6.0	11.2		
	COLUMN %	1.0	3.7	2.4	2.1	0.0	1.8	1.5	0.7	1.7	
OTHER WORK	ESTIMATE	253	1010	453	628	0	9	55	106	2514	
	% STD ERR	41.8	23.8	32.6	31.8	0.0	*	*	*	14.7	
	ROW %	10.1	40.2	18.0	25.0	0.0	0.4	2.2	4.2		
	COLUMN %	0.6	8.6	1.1	0.8	0.0	0.9	0.3	0.2	1.0	
COMMUTER	ESTIMATE	6	14	20	262	0	0	313	970	1585	
	% STD ERR	*	*	29.9	42.2	0.0	0.0	44.0	21.8	17.2	
	ROW %	0.4	0.9	1.3	16.5	0.0	0.0	19.7	61.2		
	COLUMN %	0.0	0.1	0.1	0.3	0.0	0.0	1.8	1.4	0.6	

TABLE 2-24

HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

		1983							
		1	2	3	4	5	6	7	8
		TOTALS							
AIR TAXI	ESTIMATE	17	1320	160	1005	0	415	487	3853
	% STD ERR	39.5	20.6	48.5	23.9	0.0	34.1	30.6	11.6
	ROW %	0.2	18.2	2.2	13.8	0.0	5.7	6.7	53.1
	COLUMN %	0.0	8.7	0.4	1.3	0.0	39.9	2.8	5.7
OTHER	ESTIMATE	723	573	546	1316	3	13	451	1555
	% STD ERR	27.6	28.4	31.6	21.0	*	33.6	36.5	18.0
	ROW %	14.0	11.1	10.5	25.4	0.1	0.3	8.7	30.0
	COLUMN %	1.7	3.8	1.4	1.7	0.6	1.2	2.6	2.3
RENTAL	ESTIMATE	476	99	1115	3066	0	0	1489	1790
	% STD ERR	34.0	49.1	25.5	15.4	0.0	0.0	21.1	18.7
	ROW %	5.9	1.2	13.9	38.2	0.0	0.0	18.5	22.3
	COLUMN %	1.2	0.6	2.8	3.9	0.0	0.0	8.6	2.7
INACTIVE	ESTIMATE	19290	2840	7886	4921	5	20	519	2034
	% STD ERR	4.8	13.2	8.2	11.0	*	*	30.7	15.7
	ROW %	51.4	7.6	21.0	13.1	0.0	0.1	1.4	5.4
	COLUMN %	46.7	18.6	19.7	6.3	1.0	1.9	3.0	3.0
TOTALS	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8
	COLUMN %								

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR RNAV	
4. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
5. TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
VOR OR ADF OR RNAV	ALTITUDE ENCODING EQUIPMENT
6. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
4096 CODE TRANSPONDER	VOR OR RNAV
ALTITUDE ENCODING EQUIPMENT	OME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2 25

HIERARCHICAL GROUPS - HOURS FLOWN VS CAPABILITY GROUP

1983										PAGE 1 OF 2	
	1	2	3	4	5	6	7	8	TOTALS		
1-49	ESTIMATE	10834	4616	14044	18659	216	145	2499	6076	57090	
	% STD ERR	6.7	10.1	6.2	5.6	7	7	15.8	9.8	2.8	
	ROW %	19.0	8.1	24.6	32.7	0.4	0.3	4.4	10.6		
	COLUMN %	26.2	30.3	35.1	23.9	42.4	13.9	14.4	9.0	21.9	
50-99	ESTIMATE	3918	2384	9170	21332	50	215	4597	12487	54153	
	% STD ERR	11.3	14.3	7.9	5.3	7	7	11.7	6.8	3.0	
	ROW %	7.2	4.4	16.9	39.4	0.1	0.4	8.5	23.1		
	COLUMN %	9.5	15.6	23.0	27.4	9.8	20.7	26.6	18.6	20.8	
100-149	ESTIMATE	1920	1094	3484	12538	5	182	3292	13115	35629	
	% STD ERR	17.9	20.6	13.2	7.1	7	7	14.1	8.5	3.9	
	ROW %	5.4	3.1	9.8	35.2	0.0	0.5	9.2	36.8		
	COLUMN %	4.6	7.2	8.7	16.1	1.0	17.5	19.0	19.5	13.7	
150-199	ESTIMATE	1119	783	1082	5086	5	40	1362	7687	17164	
	% STD ERR	24.0	25.0	24.8	11.4	7	7	20.7	8.7	5.8	
	ROW %	6.5	4.6	6.3	29.6	0.0	0.2	7.9	44.8		
	COLUMN %	2.7	5.1	2.7	6.5	1.0	3.8	7.9	11.4	6.6	
200-249	ESTIMATE	853	468	792	4374	97	94	610	6639	13928	
	% STD ERR	28.2	34.9	27.5	12.5	7	7	31.2	9.2	6.5	
	ROW %	6.1	3.4	5.7	31.4	0.7	0.7	4.4	47.7		
	COLUMN %	2.1	3.1	2.0	5.6	19.0	9.0	3.5	9.9	5.3	
250-299	ESTIMATE	1019	340	856	2391	0	4	658	4346	9612	
	% STD ERR	24.6	41.9	26.8	17.3	0.0	7	32.0	11.0	7.8	
	ROW %	10.6	3.5	8.9	24.9	0.0	0.0	6.8	45.2		
	COLUMN %	2.5	2.2	2.1	3.1	0.0	0.4	3.8	6.5	3.7	
300-349	ESTIMATE	789	376	589	1607	0	0	369	3475	7206	
	% STD ERR	28.5	35.0	34.0	20.5	0.0	0.0	43.5	12.6	9.1	
	ROW %	10.9	5.2	8.2	22.3	0.0	0.0	5.1	48.2		
	COLUMN %	1.9	2.5	1.5	2.1	0.0	0.0	2.1	5.2	2.8	
350-399	ESTIMATE	375	242	179	1150	0	23	363	2255	4586	
	% STD ERR	43.2	48.7	7	25.0	0.0	7	35.6	15.6	11.4	
	ROW %	8.2	5.3	3.9	25.1	0.0	0.5	7.9	49.2		
	COLUMN %	0.9	1.6	0.4	1.5	0.0	2.2	2.1	3.4	1.8	

TABLE 2-25

HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP
(CONTINUED)

		1983								PAGE 2 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
400-449	ESTIMATE	367	382	583	1281	44	152	609	2319	5736	
	% STD ERR	44.6	36.8	35.5	23.2	*	*	34.9	15.2	10.4	
	ROW %	6.4	6.7	10.2	22.3	0.8	2.6	10.6	40.4	2.2	
	COLUMN %	0.9	2.5	1.5	1.6	8.6	14.6	3.5	3.5		
450 UP	ESTIMATE	631	1401	1499	4896	22	180	2158	7095	17882	
	% STD ERR	28.9	19.5	20.9	11.8	*	*	16.8	7.9	5.4	
	ROW %	3.5	7.8	8.4	27.4	0.1	1.0	12.1	39.7	6.9	
	COLUMN %	1.5	9.2	3.8	6.3	4.3	17.3	12.5	10.6		
INACTIVE	ESTIMATE	19290	2840	7886	4921	5	20	519	2034	37515	
	% STD ERR	4.8	13.2	8.2	11.0	*	*	30.7	15.7	3.4	
	ROW %	51.4	7.6	21.0	13.1	0.0	0.1	1.4	5.4		
	COLUMN %	46.7	18.6	19.7	6.3	1.0	1.9	3.0	3.0	14.4	
TOTALS	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505	
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1		
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8		
	COLUMN %										

KEY

GROUP		GROUP	
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER	ALTITUDE ENCODING EQUIPMENT
TWO SYSTEMS - AIR TAXIS	VOR OR RNAV	ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR RNAV	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER	VOR OR RNAV
	ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT	DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-26

HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP

1983										PAGE 1 OF 2	
	1	2	3	4	5	6	7	8	TOTALS		
0-4 YRS	ESTIMATE	3877	1912	3411	7051	415	3939	16486	37165		
	% STD ERR	12.6	16.0	14.6	10.0	40.0	12.7	5.6	3.7		
	ROW %	10.4	5.1	9.2	19.0	1.1	10.6	44.4	14.3		
	COLUMN %	9.4	12.5	8.5	9.0	39.9	22.8	24.5			
5-9 YRS	ESTIMATE	5272	2691	5340	18348	263	5408	22984	60495		
	% STD ERR	11.1	14.1	11.4	6.1	49.9	11.4	4.9	2.9		
	ROW %	8.7	4.4	8.8	30.3	0.4	8.9	38.0	23.2		
	COLUMN %	12.8	17.6	13.4	23.5	36.9	31.3	34.2			
10-14 YRS	ESTIMATE	3484	2396	5044	13235	104	1809	9644	35798		
	% STD ERR	13.6	15.3	11.2	7.1	*	19.5	7.8	4.0		
	ROW %	9.7	6.7	14.1	37.0	0.3	5.1	26.9	13.7		
	COLUMN %	8.4	15.7	12.6	17.0	20.0	10.5	14.4			
15-19 YRS	ESTIMATE	3985	2306	7865	18802	195	2533	10275	46126		
	% STD ERR	12.9	15.5	9.2	5.7	*	15.9	7.4	3.4		
	ROW %	8.6	5.0	17.1	40.8	0.4	5.5	22.3	17.7		
	COLUMN %	9.6	15.1	19.7	24.1	32.5	14.6	15.3			
20-24 YRS	ESTIMATE	1752	1088	4425	10556	50	1803	3771	23451		
	% STD ERR	17.9	21.7	11.4	7.4	*	17.6	11.5	4.7		
	ROW %	7.5	4.6	18.9	45.0	0.0	7.7	16.1	9.0		
	COLUMN %	4.2	7.1	11.1	13.5	1.0	10.4	5.6			
25-29 YRS	ESTIMATE	1816	976	3776	5394	21	601	2063	14646		
	% STD ERR	18.3	24.5	13.1	10.7	35.8	28.7	16.4	6.2		
	ROW %	12.4	6.7	25.8	36.8	0.1	4.1	14.1	5.6		
	COLUMN %	4.4	6.4	9.5	6.9	2.0	3.5	3.1			
30-34 YRS	ESTIMATE	1760	931	2755	2584	59	466	599	9153		
	% STD ERR	16.3	24.1	12.1	14.8	*	26.5	28.8	6.8		
	ROW %	19.2	10.2	30.1	28.2	0.6	5.1	6.5	3.5		
	COLUMN %	4.3	6.1	6.9	3.3	5.7	2.7	0.9			
35+ YRS	ESTIMATE	17575	3287	8384	3027	19	802	573	33668		
	% STD ERR	4.7	13.1	7.6	11.6	47.5	27.7	20.9	3.2		
	ROW %	52.2	9.8	24.9	9.0	0.1	2.4	1.7	12.9		
	COLUMN %	42.5	21.6	21.0	3.9	1.8	4.6	0.9			

TABLE 2-26
HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

[illegible]

KEY

GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS TWO SYSTEMS - AIR TAXIS 4096 CODE TRANSPONDER VOR OR RNAV	7. TWO-WAY COMMUNICATIONS TWO SYSTEMS - AIR TAXIS 4096 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT
2. TWO-WAY COMMUNICATIONS		
3. TWO-WAY COMMUNICATIONS TWO SYSTEMS - AIR TAXIS VOR OR ADF OR RNAV	5. 4096 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT	8. TWO-WAY COMMUNICATIONS TWO SYSTEMS - AIR TAXIS ALTITUDE ENCODING EQUIPMENT 4096 CODE TRANSPONDER VOR OR RNAV DME
	6. TWO-WAY COMMUNICATIONS 4096 CODE TRANSPONDER ALTITUDE ENCODING EQUIPMENT	

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-27

HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

1983										PAGE 1 OF 2	
	1	2	3	4	5	6	7	8	TOTALS		
FIXED WING	29652	7026	26275	17578	12	97	2274	1308	84221		
PISTON	3.6	9.1	4.0	5.5	*	*	16.9	23.2	0.0		
ENG=1	35.2	8.3	31.2	20.9	0.0	0.1	2.7	1.6			
1-3 SEATS	71.8	46.1	65.8	22.6	2.4	9.3	13.1	1.9	32.3		
FIXED WING	3725	1852	12332	53898	390	486	12613	34254	119549		
PISTON	11.8	16.1	6.2	2.6	41.5	38.5	6.8	3.7	0.0		
ENG=1	3.1	1.5	10.3	45.1	0.3	0.4	10.6	28.7			
4+ SEATS	9.0	12.1	30.9	69.2	76.5	46.7	72.9	51.0	45.9		
FIXED WING	297	51	301	3403	52	72	980	13536	18691		
PISTON	38.8	*	36.1	11.1	*	*	22.7	3.2	0.0		
ENG=2	1.6	0.3	1.6	18.2	0.3	0.4	5.2	72.4			
1-6 SEATS	0.7	0.3	0.8	4.4	10.2	6.9	5.7	20.1	7.2		
FIXED WING	390	144	191	883	6	243	480	7792	10130		
PISTON	20.2	*	16.1	18.9	*	40.2	22.3	3.0	0.0		
ENG=2	3.8	1.4	1.9	8.7	0.1	2.4	4.7	76.9			
7+ SEATS	0.9	0.9	0.5	1.1	1.2	23.3	2.8	11.6	3.9		
FIXED WING	42	2	28	125	0	0	23	106	327		
PISTON	30.7	*	39.7	14.8	0.0	0.0	41.2	16.4	0.0		
OTHER	12.8	0.6	8.6	38.2	0.0	0.0	7.0	32.4			
	0.1	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.1		
FIXED WING	0	0	1	89	9	31	70	4668	4868		
TURBOPROP	0.0	0.0	*	*	*	*	*	1.9	0.0		
ENG=2	0.0	0.0	0.0	1.8	0.2	0.6	1.4	95.9			
1-12 SEATS	0.0	0.0	0.0	0.1	1.8	3.0	0.4	6.9	1.9		
FIXED WING	8	0	0	97	0	20	25	518	668		
TURBOPROP	*	0.0	0.0	49.6	0.0	*	*	11.0	0.0		
ENG=2	1.2	0.0	0.0	14.5	0.0	3.0	2.7	77.5			
13+ SEATS	0.0	0.0	0.0	0.1	0.0	1.9	0.1	0.8	0.3		
FIXED WING	99	7	11	22	0	0	3	61	204		
TURBOPROP	41.1	*	*	*	0.0	0.0	*	*	0.0		
OTHER	48.5	3.4	5.4	10.8	0.0	0.0	1.5	29.9			
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1		

TABLE 2-27

HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
(CONTINUED)

1983									
	1	2	3	4	5	6	7	8	TOTALS
FIXED WING TURBOJET ENG=2	47	0	0	92	43	0	0	3473	3655
	% STD ERR	*	0.0	*	*	0.0	0.0	2.5	0.0
	ROW %	1.3	0.0	2.5	1.2	0.0	0.0	95.0	0.0
FIXED WING TURBOJET OTHER	0.1	0.0	0.0	0.1	8.4	0.0	0.0	5.2	1.4
	COLUMN %	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	ESTIMATE	32	5	6	9	0	0	668	720
ROTORCRAFT PISTON	% STD ERR	*	46.5	44.3	*	0.0	0.0	4.5	0.0
	ROW %	4.4	0.7	0.8	1.3	0.0	0.0	92.8	0.0
	COLUMN %	0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.3
ROTORCRAFT TURBINE	2861	1929	198	349	0	39	37	0	5413
	% STD ERR	7.3	9.9	19.4	34.7	0.0	*	0.0	0.0
	ROW %	52.9	35.6	3.7	6.4	0.0	0.7	0.0	0.0
OTHER	6.9	12.6	0.5	0.4	0.0	3.7	0.2	0.0	2.1
	COLUMN %	0.6	5.8	1.2	1.7	1.0	4.6	1.2	1.8
	ESTIMATE	267	891	480	1362	0	790	780	4580
ALL CRAFT	% STD ERR	39.7	23.1	31.9	16.9	0.0	25.2	23.7	0.0
	ROW %	5.8	19.5	10.5	29.7	0.0	17.2	17.0	0.0
	COLUMN %	0.6	5.8	1.2	1.7	1.0	4.6	1.2	1.8
OTHER	3906	3343	131	35	0	44	0	17	7476
	% STD ERR	6.8	7.9	*	*	*	0.0	*	0.0
	ROW %	52.2	44.7	1.8	0.5	0.6	0.0	0.2	0.0
ALL CRAFT	9.5	21.9	0.3	0.0	0.0	4.2	0.0	0.0	2.9
	COLUMN %	0.3	21.9	0.3	0.0	4.2	0.0	0.0	2.9
	ESTIMATE	41326	15250	39955	77943	510	17295	67181	260505
ALL CRAFT	% STD ERR	2.9	5.3	3.3	2.3	34.5	5.7	2.1	0.0
	ROW %	15.9	5.9	15.3	29.9	0.2	6.6	25.8	0.0
	COLUMN %	0.3	5.9	15.3	29.9	0.2	6.6	25.8	0.0

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	VOR OR RNAV
VOR OR ADF OR RNAV	ALTITUDE ENCODING EQUIPMENT
4. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
5. 4096 CODE TRANSPONDER	TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
6. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
4096 CODE TRANSPONDER	VOR OR RNAV
ALTITUDE ENCODING EQUIPMENT	DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-28

HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP

		1983								PAGE 1 OF 2	
		1	2	3	4	5	6	7	8	TOTALS	
ALASKAN	ESTIMATE	827	966	2912	2283	97	4	36	443	7570	
	% STD ERR	25.9	23.3	14.1	16.8	*	*	*	36.7	8.7	
	ROW %	10.9	12.8	38.5	30.2	1.3	0.1	0.5	5.9	2.9	
	COLUMN %	2.0	6.3	7.3	2.9	19.0	0.4	0.2	0.7		
CENTRAL	ESTIMATE	2646	473	2957	4941	0	37	498	3216	14768	
	% STD ERR	14.3	28.7	15.5	11.8	0.0	*	37.3	13.9	6.5	
	ROW %	17.9	3.2	20.0	33.5	0.0	0.3	3.4	21.8		
	COLUMN %	6.4	3.1	7.4	6.3	0.0	3.6	2.9	4.8	5.7	
EASTERN	ESTIMATE	4026	1890	4185	7901	85	20	2592	8119	28817	
	% STD ERR	11.3	17.9	12.2	9.4	*	*	16.4	8.6	4.5	
	ROW %	14.0	6.6	14.5	27.4	0.3	0.1	9.0	28.2		
	COLUMN %	9.7	12.4	10.5	10.1	16.7	1.9	15.0	12.1	11.1	
EUROPEAN	ESTIMATE	3	13	20	177	2	0	15	433	663	
	% STD ERR	*	*	*	*	*	0.0	*	33.8	27.4	
	ROW %	0.5	2.0	3.0	26.7	0.3	0.0	2.3	65.3		
	COLUMN %	0.0	0.1	0.1	0.2	0.4	0.0	0.1	0.6	0.3	
GREAT LAKE	ESTIMATE	8526	2566	8008	14193	51	214	2197	10620	46375	
	% STD ERR	7.9	14.4	8.6	6.8	*	*	17.1	7.4	3.4	
	ROW %	18.4	5.5	17.3	30.6	0.1	0.5	4.7	22.9		
	COLUMN %	20.6	16.8	20.0	18.2	10.0	20.6	12.7	15.8	17.8	
NEW ENGLAND	ESTIMATE	1749	384	1652	2529	2	49	891	2226	9482	
	% STD ERR	18.2	31.7	19.8	16.8	*	*	28.2	17.1	8.2	
	ROW %	18.4	4.0	17.4	26.7	0.0	0.5	9.4	23.5		
	COLUMN %	4.2	2.5	4.1	3.2	0.4	4.7	5.2	3.3	3.6	
NORTHWEST MT	ESTIMATE	3759	2470	4792	9071	77	208	1921	5143	27439	
	% STD ERR	12.0	15.3	11.4	8.6	*	*	18.4	10.7	4.6	
	ROW %	13.7	9.0	17.5	33.1	0.3	0.8	7.0	18.7		
	COLUMN %	9.1	16.2	12.0	11.6	15.1	20.0	11.1	7.7	10.5	
SOUTHERN	ESTIMATE	6219	1247	5011	12786	5	189	2144	12474	40075	
	% STD ERR	9.6	19.2	11.1	7.3	*	*	17.7	6.6	3.7	
	ROW %	15.5	3.1	12.5	31.9	0.0	0.5	5.3	31.1		
	COLUMN %	15.0	8.2	12.5	16.4	1.0	18.2	12.4	18.6	15.4	

TABLE 2-28

HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

1983

	1	2	3	4	5	6	7	8	TOTALS
SOUTHWEST	ESTIMATE	6636	1961	5223	11461	91	2232	12603	40332
	% STD ERR	9.6	16.9	11.0	7.6	*	17.2	6.7	3.7
	ROW %	16.5	4.9	13.0	28.4	0.3	5.5	31.2	15.5
	COLUMN %	16.1	12.9	13.1	14.7	12.0	12.9	18.8	
WST-PACIFI	ESTIMATE	6309	2701	5503	13334	132	4846	12022	44982
	% STD ERR	9.2	12.6	10.2	7.0	*	11.6	7.0	3.4
	ROW %	14.0	6.0	12.2	29.6	0.3	10.8	26.7	17.3
	COLUMN %	15.3	17.7	13.8	17.1	12.9	28.0	17.9	
TOTALS	ESTIMATE	41326	15250	39955	77943	510	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.4	6.6	25.8	
	COLUMN %								

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
3. TWO-WAY COMMUNICATIONS	9. TWO SYSTEMS - AIR TAXIS
4. TWO SYSTEMS - AIR TAXIS	10. TWO SYSTEMS - AIR TAXIS
5. TWO SYSTEMS - AIR TAXIS	11. TWO SYSTEMS - AIR TAXIS
6. TWO SYSTEMS - AIR TAXIS	12. TWO SYSTEMS - AIR TAXIS
7. TWO SYSTEMS - AIR TAXIS	13. TWO SYSTEMS - AIR TAXIS
8. TWO SYSTEMS - AIR TAXIS	14. TWO SYSTEMS - AIR TAXIS
9. TWO SYSTEMS - AIR TAXIS	15. TWO SYSTEMS - AIR TAXIS
10. TWO SYSTEMS - AIR TAXIS	16. TWO SYSTEMS - AIR TAXIS
11. TWO SYSTEMS - AIR TAXIS	17. TWO SYSTEMS - AIR TAXIS
12. TWO SYSTEMS - AIR TAXIS	18. TWO SYSTEMS - AIR TAXIS
13. TWO SYSTEMS - AIR TAXIS	19. TWO SYSTEMS - AIR TAXIS
14. TWO SYSTEMS - AIR TAXIS	20. TWO SYSTEMS - AIR TAXIS
15. TWO SYSTEMS - AIR TAXIS	21. TWO SYSTEMS - AIR TAXIS
16. TWO SYSTEMS - AIR TAXIS	22. TWO SYSTEMS - AIR TAXIS
17. TWO SYSTEMS - AIR TAXIS	23. TWO SYSTEMS - AIR TAXIS
18. TWO SYSTEMS - AIR TAXIS	24. TWO SYSTEMS - AIR TAXIS
19. TWO SYSTEMS - AIR TAXIS	25. TWO SYSTEMS - AIR TAXIS
20. TWO SYSTEMS - AIR TAXIS	26. TWO SYSTEMS - AIR TAXIS
21. TWO SYSTEMS - AIR TAXIS	27. TWO SYSTEMS - AIR TAXIS
22. TWO SYSTEMS - AIR TAXIS	28. TWO SYSTEMS - AIR TAXIS
23. TWO SYSTEMS - AIR TAXIS	29. TWO SYSTEMS - AIR TAXIS
24. TWO SYSTEMS - AIR TAXIS	30. TWO SYSTEMS - AIR TAXIS
25. TWO SYSTEMS - AIR TAXIS	31. TWO SYSTEMS - AIR TAXIS
26. TWO SYSTEMS - AIR TAXIS	32. TWO SYSTEMS - AIR TAXIS
27. TWO SYSTEMS - AIR TAXIS	33. TWO SYSTEMS - AIR TAXIS
28. TWO SYSTEMS - AIR TAXIS	34. TWO SYSTEMS - AIR TAXIS
29. TWO SYSTEMS - AIR TAXIS	35. TWO SYSTEMS - AIR TAXIS
30. TWO SYSTEMS - AIR TAXIS	36. TWO SYSTEMS - AIR TAXIS
31. TWO SYSTEMS - AIR TAXIS	37. TWO SYSTEMS - AIR TAXIS
32. TWO SYSTEMS - AIR TAXIS	38. TWO SYSTEMS - AIR TAXIS
33. TWO SYSTEMS - AIR TAXIS	39. TWO SYSTEMS - AIR TAXIS
34. TWO SYSTEMS - AIR TAXIS	40. TWO SYSTEMS - AIR TAXIS
35. TWO SYSTEMS - AIR TAXIS	41. TWO SYSTEMS - AIR TAXIS
36. TWO SYSTEMS - AIR TAXIS	42. TWO SYSTEMS - AIR TAXIS
37. TWO SYSTEMS - AIR TAXIS	43. TWO SYSTEMS - AIR TAXIS
38. TWO SYSTEMS - AIR TAXIS	44. TWO SYSTEMS - AIR TAXIS
39. TWO SYSTEMS - AIR TAXIS	45. TWO SYSTEMS - AIR TAXIS
40. TWO SYSTEMS - AIR TAXIS	46. TWO SYSTEMS - AIR TAXIS
41. TWO SYSTEMS - AIR TAXIS	47. TWO SYSTEMS - AIR TAXIS
42. TWO SYSTEMS - AIR TAXIS	48. TWO SYSTEMS - AIR TAXIS
43. TWO SYSTEMS - AIR TAXIS	49. TWO SYSTEMS - AIR TAXIS
44. TWO SYSTEMS - AIR TAXIS	50. TWO SYSTEMS - AIR TAXIS
45. TWO SYSTEMS - AIR TAXIS	51. TWO SYSTEMS - AIR TAXIS
46. TWO SYSTEMS - AIR TAXIS	52. TWO SYSTEMS - AIR TAXIS
47. TWO SYSTEMS - AIR TAXIS	53. TWO SYSTEMS - AIR TAXIS
48. TWO SYSTEMS - AIR TAXIS	54. TWO SYSTEMS - AIR TAXIS
49. TWO SYSTEMS - AIR TAXIS	55. TWO SYSTEMS - AIR TAXIS
50. TWO SYSTEMS - AIR TAXIS	56. TWO SYSTEMS - AIR TAXIS
51. TWO SYSTEMS - AIR TAXIS	57. TWO SYSTEMS - AIR TAXIS
52. TWO SYSTEMS - AIR TAXIS	58. TWO SYSTEMS - AIR TAXIS
53. TWO SYSTEMS - AIR TAXIS	59. TWO SYSTEMS - AIR TAXIS
54. TWO SYSTEMS - AIR TAXIS	60. TWO SYSTEMS - AIR TAXIS
55. TWO SYSTEMS - AIR TAXIS	61. TWO SYSTEMS - AIR TAXIS
56. TWO SYSTEMS - AIR TAXIS	62. TWO SYSTEMS - AIR TAXIS
57. TWO SYSTEMS - AIR TAXIS	63. TWO SYSTEMS - AIR TAXIS
58. TWO SYSTEMS - AIR TAXIS	64. TWO SYSTEMS - AIR TAXIS
59. TWO SYSTEMS - AIR TAXIS	65. TWO SYSTEMS - AIR TAXIS
60. TWO SYSTEMS - AIR TAXIS	66. TWO SYSTEMS - AIR TAXIS
61. TWO SYSTEMS - AIR TAXIS	67. TWO SYSTEMS - AIR TAXIS
62. TWO SYSTEMS - AIR TAXIS	68. TWO SYSTEMS - AIR TAXIS
63. TWO SYSTEMS - AIR TAXIS	69. TWO SYSTEMS - AIR TAXIS
64. TWO SYSTEMS - AIR TAXIS	70. TWO SYSTEMS - AIR TAXIS
65. TWO SYSTEMS - AIR TAXIS	71. TWO SYSTEMS - AIR TAXIS
66. TWO SYSTEMS - AIR TAXIS	72. TWO SYSTEMS - AIR TAXIS
67. TWO SYSTEMS - AIR TAXIS	73. TWO SYSTEMS - AIR TAXIS
68. TWO SYSTEMS - AIR TAXIS	74. TWO SYSTEMS - AIR TAXIS
69. TWO SYSTEMS - AIR TAXIS	75. TWO SYSTEMS - AIR TAXIS
70. TWO SYSTEMS - AIR TAXIS	76. TWO SYSTEMS - AIR TAXIS
71. TWO SYSTEMS - AIR TAXIS	77. TWO SYSTEMS - AIR TAXIS
72. TWO SYSTEMS - AIR TAXIS	78. TWO SYSTEMS - AIR TAXIS
73. TWO SYSTEMS - AIR TAXIS	79. TWO SYSTEMS - AIR TAXIS
74. TWO SYSTEMS - AIR TAXIS	80. TWO SYSTEMS - AIR TAXIS
75. TWO SYSTEMS - AIR TAXIS	81. TWO SYSTEMS - AIR TAXIS
76. TWO SYSTEMS - AIR TAXIS	82. TWO SYSTEMS - AIR TAXIS
77. TWO SYSTEMS - AIR TAXIS	83. TWO SYSTEMS - AIR TAXIS
78. TWO SYSTEMS - AIR TAXIS	84. TWO SYSTEMS - AIR TAXIS
79. TWO SYSTEMS - AIR TAXIS	85. TWO SYSTEMS - AIR TAXIS
80. TWO SYSTEMS - AIR TAXIS	86. TWO SYSTEMS - AIR TAXIS
81. TWO SYSTEMS - AIR TAXIS	87. TWO SYSTEMS - AIR TAXIS
82. TWO SYSTEMS - AIR TAXIS	88. TWO SYSTEMS - AIR TAXIS
83. TWO SYSTEMS - AIR TAXIS	89. TWO SYSTEMS - AIR TAXIS
84. TWO SYSTEMS - AIR TAXIS	90. TWO SYSTEMS - AIR TAXIS
85. TWO SYSTEMS - AIR TAXIS	91. TWO SYSTEMS - AIR TAXIS
86. TWO SYSTEMS - AIR TAXIS	92. TWO SYSTEMS - AIR TAXIS
87. TWO SYSTEMS - AIR TAXIS	93. TWO SYSTEMS - AIR TAXIS
88. TWO SYSTEMS - AIR TAXIS	94. TWO SYSTEMS - AIR TAXIS
89. TWO SYSTEMS - AIR TAXIS	95. TWO SYSTEMS - AIR TAXIS
90. TWO SYSTEMS - AIR TAXIS	96. TWO SYSTEMS - AIR TAXIS
91. TWO SYSTEMS - AIR TAXIS	97. TWO SYSTEMS - AIR TAXIS
92. TWO SYSTEMS - AIR TAXIS	98. TWO SYSTEMS - AIR TAXIS
93. TWO SYSTEMS - AIR TAXIS	99. TWO SYSTEMS - AIR TAXIS
94. TWO SYSTEMS - AIR TAXIS	100. TWO SYSTEMS - AIR TAXIS

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-29

NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP

1983

PAGE 1 OF 2

	L	L. MB. GS	L. MB. GS, RA	LRN	RA	ML	L. MB. GS, ML	LRN, ML	NO GROUP	ALL CRAFT
EXECUTIVE	ESTIMATE	469	6294	8877	4240	9156	123	137	1119	17587
	% STD ERR	34.8	9.1	5.1	8.7	5.1	*	*	23.3	4.3
	ROW %	2.7	35.8	50.5	24.1	52.1	0.7	0.8	6.4	6.8
	COLUMN %	3.0	6.7	46.2	45.1	45.8	14.3	28.9	0.9	
BUSINESS	ESTIMATE	1743	30168	4825	1748	4852	372	62	7792	46705
	% STD ERR	19.1	4.0	10.1	18.0	10.1	43.0	*	8.9	3.1
	ROW %	3.7	64.6	10.3	3.7	10.4	0.8	0.1	16.7	
	COLUMN %	11.1	32.3	25.1	18.6	24.3	43.3	13.1	6.6	17.9
PERSONAL	ESTIMATE	7154	34419	2105	1323	2221	274	202	56610	106861
	% STD ERR	9.3	3.8	17.6	21.6	17.1	*	*	2.6	1.6
	ROW %	6.7	32.2	2.0	1.2	2.1	0.3	0.2	53.0	
	COLUMN %	45.6	35.9	11.0	14.1	11.1	31.9	42.6	47.6	41.0
INSTRUCT.	ESTIMATE	3167	4761	126	290	183	0	0	7540	16429
	% STD ERR	14.9	11.7	*	*	*	0.0	0.0	9.1	6.1
	ROW %	19.3	29.0	0.8	1.8	1.1	0.0	0.0	45.9	
	COLUMN %	20.2	5.1	0.7	3.1	0.9	0.3	0.0	6.3	6.3
AERIAL AP.	ESTIMATE	124	312	3	2	6	0	0	6527	6972
	% STD ERR	*	38.6	*	*	*	0.0	0.0	9.5	9.1
	ROW %	1.8	4.5	0.0	0.0	0.1	0.0	0.0	93.6	
	COLUMN %	0.8	0.3	0.0	0.0	0.0	0.0	0.0	5.5	2.7
AERIAL OBS	ESTIMATE	524	1548	86	245	125	0	0	1919	4307
	% STD ERR	32.7	20.7	*	48.8	*	0.0	0.0	15.9	11.4
	ROW %	12.2	35.9	2.0	5.7	2.9	0.0	0.0	44.6	
	COLUMN %	3.3	1.7	0.4	2.6	0.6	0.0	0.0	1.6	1.7
OTHER WORK	ESTIMATE	123	158	53	71	54	4	0	2151	2514
	% STD ERR	*	*	*	*	*	*	0.0	15.9	14.7
	ROW %	4.9	6.3	2.1	2.8	2.1	0.2	0.0	85.6	
	COLUMN %	0.8	0.2	0.3	0.8	0.3	0.5	0.0	1.8	1.0
COMMUTER	ESTIMATE	10	1055	291	0	296	0	0	29	1585
	% STD ERR	*	21.8	37.6	0.0	37.0	0.0	0.0	*	17.2
	ROW %	0.6	56.6	18.4	0.0	18.7	0.0	0.0	1.8	
	COLUMN %	0.1	1.1	1.5	0.0	1.5	0.0	0.0	0.0	0.6

TABLE 2-29

NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

1983

	L	L. MB	L. MB, GS	L. MB, GS, RA	LRN	RA	ML	L. MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
AIR TAXI											
ESTIMATE	355	109	4145	1272	603	1489	39	39	39	1121	7257
% STD ERR	37.5	*	11.2	20.4	29.5	18.7	*	*	*	22.2	8.3
ROW %	4.9	1.5	57.1	17.5	8.3	20.5	0.5	0.5	0.5	15.4	
COLUMN %	2.3	0.9	4.4	6.6	6.4	7.5	3.7	4.5	8.2	0.9	2.8
OTHER											
ESTIMATE	290	248	1268	806	419	814	16	16	10	2498	5180
% STD ERR	38.5	49.1	20.6	24.2	37.0	24.0	*	*	*	14.9	10.1
ROW %	5.6	4.8	24.5	15.6	8.1	15.7	0.3	0.3	0.2	48.2	
COLUMN %	1.8	2.1	1.4	4.2	4.5	4.1	1.5	1.9	2.1	2.1	2.0
RENTAL											
ESTIMATE	559	458	5041	389	138	392	0	0	0	1586	8035
% STD ERR	36.9	40.7	11.4	40.1	*	39.9	0.0	0.0	0.0	20.0	9.0
ROW %	7.0	5.7	62.7	4.8	1.7	4.9	0.0	0.0	0.0	19.7	
COLUMN %	3.6	3.9	5.4	2.0	1.5	2.0	0.0	0.0	0.0	1.3	3.1
INACTIVE											
ESTIMATE	1314	1415	4126	498	335	502	54	45	34	30140	37515
% STD ERR	19.5	21.2	11.5	29.2	41.8	29.0	*	*	*	3.8	3.4
ROW %	3.5	3.8	11.0	1.3	0.9	1.3	0.1	0.1	0.1	80.3	
COLUMN %	8.4	11.9	4.4	2.6	3.6	2.5	5.2	5.2	7.2	25.4	14.4
TOTALS											
ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	26.6	33.2	1.3	
ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.3	0.2	45.6	

KEY

GROUP

L: LOCALIZER

MB: MARKER BEACON

GS: GLIDE SLOPE

GROUP

RA: RADAR ALTIMETER

LRN: LONG RANGE RNAV

ML: MICROWAVE LANDING SYSTEM

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-30

NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP

1983

PAGE 1 OF 2

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
1-49	4230 12.0 7.4 27.0	2835 14.8 5.0 23.9	12723 6.7 22.3 13.6	1246 20.4 2.2 6.5	504 31.7 0.9 5.4	1371 19.7 2.4 6.9	310 48.6 0.5 29.8	175 * 0.3 20.3	84 * 0.1 17.7	35697 3.6 62.5 30.0	57090 2.8 21.9
50-99	3046 14.2 5.6 19.4	3548 13.1 6.6 29.9	21620 5.1 39.9 23.2	2141 16.0 4.0 11.1	1432 21.1 2.6 15.2	2159 15.0 4.0 10.8	233 * 0.4 22.4	225 * 0.4 26.2	121 * 0.2 25.5	23410 4.9 43.2 19.7	54153 3.0 20.8
100-149	2060 18.0 5.8 13.1	1803 19.7 5.1 15.2	19069 5.5 53.5 20.4	2340 15.3 6.6 12.2	1038 23.5 2.9 11.1	2494 14.9 7.0 12.5	73 * 0.2 7.0	72 * 0.2 8.4	2 * 0.0 0.4	10215 7.6 28.7 8.6	35629 3.9 13.7
150-199	1095 24.9 6.4 7.0	582 33.8 3.7 4.9	9766 7.9 56.9 10.5	1725 17.7 10.1 9.0	1164 22.4 6.8 12.4	1834 17.1 10.7 9.2	148 * 0.9 14.2	148 * 0.9 17.2	16 * 0.1 3.4	3843 12.5 22.4 3.2	17164 5.8 6.6
200-249	673 31.8 4.8 4.3	512 36.5 3.7 4.3	7418 9.0 53.3 7.9	1857 16.3 13.3 9.7	943 24.6 6.8 10.0	1897 16.1 13.6 9.5	59 * 0.4 5.7	59 * 0.4 6.9	54 * 0.4 11.4	3350 14.0 24.1 2.8	13928 6.5 5.3
250-299	528 36.9 5.5 3.4	36 * 1.9 1.6	3978 12.6 41.4 4.3	2036 15.4 21.2 10.6	810 25.3 8.4 8.6	2046 15.3 21.3 10.2	1 * 0.0 0.1	1 * 0.0 0.1	0 0.0 0.0 0.0	2874 14.8 29.9 2.4	9612 7.8 3.7
300-349	669 32.3 9.3 4.3	186 * 2.6 1.6	2856 14.9 39.6 3.1	1589 17.6 22.1 8.3	535 28.8 7.4 5.7	1685 17.1 23.4 8.4	34 * 0.5 3.3	28 * 0.4 3.3	28 * 0.4 5.9	1889 18.0 26.2 1.6	7206 9.1 2.8
350-399	212 * 4.6 1.4	124 * 2.7 1.0	1829 18.5 39.9 2.0	1154 20.3 25.2 6.0	295 38.6 6.4 3.1	1175 20.0 25.6 5.9	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1247 23.3 27.2 1.0	4586 11.4 1.8

TABLE 2-30

NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

1983

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
400-449	ESTIMATE	399	80	2443	1358	417	1360	0	0	1453	5736
	% STD ERR	42.6	*	16.5	18.8	31.2	18.8	0.0	0.0	21.3	10.4
	ROW %	7.0	1.4	42.6	23.7	7.3	23.7	0.0	0.0	25.3	
	COLUMN %	2.5	0.7	2.6	7.1	4.4	6.8	0.0	0.0	1.2	2.2
450 UP	ESTIMATE	1571	611	7374	3364	1917	3543	144	119	4636	17882
	% STD ERR	20.7	32.0	8.7	10.7	14.6	10.5	*	*	11.5	5.4
	ROW %	8.8	3.4	41.2	18.8	10.7	19.8	0.8	0.7	25.9	
	COLUMN %	10.0	5.1	7.9	17.5	20.4	17.7	13.8	30.4	3.9	6.9
INACTIVE	ESTIMATE	1314	1415	4126	498	335	502	54	45	30140	37515
	% STD ERR	19.5	21.2	11.5	29.2	41.8	29.0	*	*	3.8	3.4
	ROW %	3.5	3.8	11.0	1.3	0.9	1.3	0.1	0.1	80.3	
	COLUMN %	8.4	11.9	4.4	2.6	3.6	2.5	5.2	7.2	25.4	14.4
TOTALS	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	118857	260505
	% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	33.2	1.3	
	ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.2	45.6	

KEY

GROUP

GROUP

L: LOCALIZER

RA: RADAR ALTIMETER

MB: MARKER BEACON

LRN: LONG RANGE RNAV

GS: GLIDE SLOPE

ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-31

NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP

1982

PAGE 1 OF 2

	L	L, MB GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
0-4 YRS	ESTIMATE	2380	518	15194	6279	3121	6320	269	12452	37165
	% STD ERR	17.4	35.3	5.9	8.9	13.2	8.8	48.0	7.0	3.7
	ROW %	6.4	1.4	40.9	16.9	8.4	17.2	0.7	33.5	
	COLUMN %	15.2	4.4	16.3	32.7	33.2	31.9	25.8	10.5	14.3
5-9 YRS	ESTIMATE	4109	1424	29630	6640	2099	7046	170	18465	60495
	% STD ERR	13.6	22.5	4.4	9.1	17.2	8.8	0.3	5.8	2.9
	ROW %	6.8	2.4	49.0	11.0	3.5	11.6	0.2	30.5	
	COLUMN %	26.2	12.0	31.7	34.6	22.3	35.3	16.3	15.5	23.2
10-14 YRS	ESTIMATE	1877	2357	13995	2890	1381	2907	161	14659	35798
	% STD ERR	19.1	17.4	6.7	14.0	20.9	14.0	0.3	6.4	4.0
	ROW %	5.2	6.6	39.1	8.1	3.9	8.1	0.4	40.9	
	COLUMN %	12.0	19.9	15.0	15.0	14.7	14.6	15.5	12.3	13.7
15-19 YRS	ESTIMATE	2700	3016	17446	2286	1220	2317	102	20461	46126
	% STD ERR	15.9	15.0	5.7	15.5	23.0	15.3	0.3	5.5	3.4
	ROW %	5.9	6.5	37.8	5.0	2.6	5.0	0.2	44.4	
	COLUMN %	17.2	25.4	18.7	11.9	13.0	11.6	9.8	17.2	17.7
20-24 YRS	ESTIMATE	1970	2025	9009	567	549	639	107	9676	23451
	% STD ERR	17.2	17.0	7.7	24.7	31.3	23.4	0.3	7.8	4.7
	ROW %	8.4	8.6	38.4	2.4	2.3	2.7	0.5	41.3	
	COLUMN %	12.6	17.1	9.7	3.0	5.8	3.2	10.3	8.1	9.0
25-29 YRS	ESTIMATE	752	1343	4670	43	380	58	17	7692	14646
	% STD ERR	29.1	21.8	10.7	28.9	42.2	38.0	0.3	9.0	6.2
	ROW %	5.1	9.2	31.9	0.3	2.6	0.4	0.1	52.5	
	COLUMN %	4.8	11.3	5.0	0.2	4.0	0.3	1.6	6.5	5.6
30-34 YRS	ESTIMATE	686	633	1640	37	28	38	4	6153	9153
	% STD ERR	26.2	28.4	16.4	43.4	0.3	42.7	0.0	8.7	6.8
	ROW %	7.5	6.9	17.9	0.4	0.3	0.4	0.0	67.2	
	COLUMN %	4.4	5.3	1.8	0.2	0.3	0.2	0.4	5.2	3.5
35+ YRS	ESTIMATE	1493	710	1691	87	324	92	62	29431	33668
	% STD ERR	17.9	29.7	14.4	23.1	43.0	26.7	0.3	3.5	3.2
	ROW %	4.4	2.1	5.0	0.3	1.0	0.3	0.2	87.4	
	COLUMN %	9.5	6.0	1.8	0.5	3.4	0.5	6.0	24.8	12.9

TABLE 2-31

NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

1983

TOTALS	ESTIMATE % STD ERR ROW %	L	L MB	L MB GS	L MB GS, RA	LRN	RA	ML	L MB GS, ML	LRN, ML	NO GROUP	ALL CRAFT
15681		15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
6 1		6 1	7 1	1 7	3 9	6 7	3 8	24 3	26 6	33 2	1 3	
6 0		6 0	4 6	35 8	7 4	3 6	7 7	0 4	0 3	0 2	45 6	

KEY

GROUP

L: LOCALIZER

MB: MARKER BEACON

GS: GLIDE SLOPE

GROUP

RA: RADAR ALTIMETER

LRN: LONG RANGE RNAV

ML: MICROWAVE LANDING SYSTEM

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

AD-A149 572

GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY(U)
TRANSPORTATION SYSTEMS CENTER CAMBRIDGE MA J C SCHWENK
OCT 84 DOT-TSC-FAA-84-3 FAA-MS-84-5

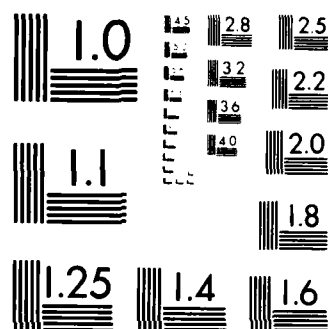
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 2-32

NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

1983

PAGE 1 OF 2

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
FIXED WING	7226	2396	4192	84	450	92	230	161	84	70118	84221
PISTON	9.2	16.9	12.6	*	38.2	*	*	*	*	1.3	0.0
ENG=1	8.6	2.8	5.0	0.1	0.5	0.1	0.3	0.2	0.1	83.3	32.3
1-3 SEATS	48.1	20.2	4.5	0.4	4.8	0.5	22.1	18.7	17.7	59.0	
FIXED WING	7132	8348	67625	3393	2876	3608	440	361	59	32412	119549
PISTON	9.0	8.4	2.0	14.1	14.9	13.7	41.0	45.2	*	3.7	0.0
ENG=1	6.0	7.0	56.6	2.8	2.4	3.0	0.4	0.3	0.0	27.1	
4+ SEATS	45.5	70.3	72.5	17.7	30.6	18.1	42.3	42.0	12.4	27.3	45.9
FIXED WING	215	771	13295	3672	872	3815	77	77	72	704	18691
PISTON	40.9	25.6	3.3	10.6	24.2	10.4	*	*	*	25.5	0.0
ENG=2	1.2	4.1	71.1	19.6	4.7	20.4	0.4	0.4	0.4	3.8	
1-6 SEATS	1.4	6.5	14.2	19.1	9.3	19.1	7.4	9.0	15.2	0.6	7.2
FIXED WING	169	29	6251	3020	428	3023	23	14	7	649	10130
PISTON	45.1	*	5.2	10.6	30.5	10.6	32.4	45.7	*	16.0	0.0
ENG=2	1.7	0.3	61.7	29.8	4.2	29.8	0.2	0.1	0.1	6.4	
7+ SEATS	1.1	0.2	6.7	15.7	4.6	15.1	2.2	1.6	1.5	0.5	3.9
FIXED WING	4	5	180	37	18	40	0	0	0	98	327
PISTON	*	*	10.5	32.6	49.2	31.3	0.0	0.0	0.0	17.7	0.0
OTHER	1.2	1.5	55.0	11.3	5.5	12.2	0.0	0.0	0.0	30.0	
	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1
FIXED WING	0	68	660	4104	610	4208	44	44	38	0	4868
TURBOPROP	0.0	*	23.9	4.1	24.8	3.8	*	*	*	0.0	0.0
ENG=2	0.0	1.4	13.6	84.3	12.5	86.4	0.9	0.9	0.8	0.0	
1-12 SEATS	0.0	0.6	0.7	21.4	6.5	21.1	4.2	5.1	8.0	0.0	1.9
FIXED WING	0	0	239	401	141	421	0	0	0	8	568
TURBOPROP	0.0	0.0	27.4	16.7	39.5	15.7	0.0	0.0	0.0	*	0.0
ENG=2	0.0	0.0	35.8	60.0	21.1	63.0	0.0	0.0	0.0	1.2	
13+ SEATS	0.0	0.0	0.3	2.1	1.5	2.1	0.0	0.0	0.0	0.0	0.3
FIXED WING	13	0	69	11	10	17	19	19	7	111	204
TURBOPROP	*	0.0	*	*	*	*	*	*	*	36.2	0.0
OTHER	8.4	0.0	33.8	5.4	4.9	8.3	9.3	9.3	3.4	54.4	
	0.1	0.0	0.1	0.1	0.1	0.1	1.8	2.2	1.5	0.1	0.1

TABLE 2-32

NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
(CONTINUED)

PAGE 2 OF 2

1983

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
FIXED WING TURBOJET ENG=2	0 0.0 0.0 0.0	72 * 2.0 0.6	62 * 1.7 0.1	3521 2.1 96.3 18.3	2343 8.3 64.1 24.9	3546 1.9 97.0 17.8	207 45.0 5.7 19.9	181 48.4 5.0 21.0	207 45.0 5.7 43.7	0 0.0 0.0 0.0	3655 0.0 0.0 1.4
ESTIMATE % STD ERR ROW % COLUMN %											
FIXED WING TURBOJET OTHER	2 * 0.3 0.0	5 46.5 0.7 0.0	72 * 10.0 0.1	602 10.8 83.6 3.1	567 13.7 78.8 6.0	602 10.8 83.6 3.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	39 * 5.4 0.0	720 0.0 0.0 0.3
ESTIMATE % STD ERR ROW % COLUMN %											
ROTORCRAFT PISTON	178 * 3.3 1.1	2 * 0.0 0.0	9 * 0.2 0.0	2 * 0.0 0.0	52 * 1.0 0.6	4 * 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5174 2.0 95.6 4.4	5413 0.0 0.0 2.1
ESTIMATE % STD ERR ROW % COLUMN %											
ROTORCRAFT TURBINE	712 26.2 15.5 4.5	176 * 3.8 1.5	679 26.6 14.8 0.7	370 34.4 8.1 1.9	1026 21.4 22.4 10.9	590 27.5 12.9 3.0	2 * 0.0 0.2	2 * 0.0 0.2	0 0.0 0.0 0.0	2108 11.9 46.0 1.8	4580 0.0 0.0 1.8
ESTIMATE % STD ERR ROW % COLUMN %											
OTHER	33 * 0.4 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 * 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7439 0.6 99.5 6.3	7478 0.0 0.0 2.9
ESTIMATE % STD ERR ROW % COLUMN %											
ALL CRAFT	15881 8.1 6.0	11868 7.1 4.6	93332 1.7 35.8	19217 3.9 7.4	9393 8.7 3.6	19973 3.8 7.7	1041 24.3 0.4	860 26.8 0.3	474 33.2 0.2	118857 1.3 45.8	260505
ESTIMATE % STD ERR ROW %											

KEY

GROUP

GROUP

L: LOCALIZER

RA: RADAR ALTIMETER

MB: MARKER BEACON

LRN: LONG RANGE RNAV

GS: GLIDF SLOPE

ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-33

NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP

PAGE 1 OF 2

1983

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT
ALASKAN	ESTIMATE	586	32	1800	74	117	195	0	0	5049	7570
	% STD ERR	31.5	39.2	18.8	*	*	44.7	0.0	0.0	10.8	8.7
	ROW %	7.7	0.4	23.8	1.0	1.5	2.6	0.0	0.0	66.7	2.9
CENTRAL	COLUMN %	3.7	0.3	1.9	0.4	1.2	1.0	0.0	0.0	4.2	
	ESTIMATE	1380	442	5011	904	347	931	96	13	6991	14768
	% STD ERR	23.3	37.3	11.5	25.1	38.8	24.6	*	*	9.3	6.5
EASTERN	ROW %	9.2	3.0	33.9	6.1	2.3	6.3	0.7	0.1	47.3	5.7
	COLUMN %	8.7	3.7	5.4	4.7	3.7	4.7	9.2	5.3	5.9	
	ESTIMATE	1638	1482	10982	2304	1156	2409	191	187	12358	28817
EUROPEAN	% STD ERR	19.3	21.8	7.6	15.5	20.5	15.1	*	*	6.9	4.5
	ROW %	5.7	5.1	38.1	8.0	4.0	8.4	0.7	0.6	42.9	11.1
	COLUMN %	10.4	12.5	11.8	12.0	12.3	12.1	18.3	21.7	10.4	
GREAT LAKE	ESTIMATE	0	0	409	222	179	222	3	3	31	663
	% STD ERR	0.0	0.0	36.7	43.2	*	43.2	*	0.0	*	27.4
	ROW %	0.0	0.0	61.7	33.5	27.0	33.5	0.5	0.5	4.7	0.3
NEW ENGLAND	COLUMN %	0.0	0.0	0.4	1.2	1.9	1.1	0.3	0.3	0.0	
	ESTIMATE	2736	2493	14492	3646	1225	3703	315	315	22808	46375
	% STD ERR	15.7	16.9	6.5	11.9	21.2	11.8	47.8	47.8	4.9	3.4
NORTHWEST MT	ROW %	5.9	5.4	31.2	7.9	2.6	8.0	0.7	0.4	49.2	17.8
	COLUMN %	17.4	21.0	15.5	19.0	13.0	18.5	30.3	35.2	19.2	
	ESTIMATE	647	594	3193	659	193	664	3	0	4337	9482
SOUTHERN	% STD ERR	32.5	34.4	14.7	31.1	*	30.9	*	0.0	11.8	8.2
	ROW %	6.8	6.3	33.7	7.0	2.0	7.0	0.0	0.0	45.7	3.6
	COLUMN %	4.1	5.0	3.4	3.4	2.1	3.3	0.3	0.0	3.6	
SOUTHERN	ESTIMATE	1467	854	8634	1150	640	1295	155	74	15046	27439
	% STD ERR	20.9	27.3	8.5	20.4	28.4	19.7	*	*	6.3	4.6
	ROW %	5.3	3.1	31.5	4.2	2.3	4.7	0.6	0.3	54.8	10.5
SOUTHERN	COLUMN %	9.4	7.2	9.3	6.0	6.8	6.5	14.9	8.6	12.7	
	ESTIMATE	2171	2362	15372	3849	1693	3969	114	109	16069	40075
	% STD ERR	17.7	16.9	6.2	11.1	18.9	10.9	*	*	6.0	3.7
SOUTHERN	ROW %	5.4	5.9	38.4	9.6	4.2	9.9	0.3	0.3	40.1	15.4
	COLUMN %	13.8	19.9	16.5	20.0	18.0	19.9	11.0	12.7	13.5	

TABLE 2-33

NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
(CONTINUED)

1983											PAGE 2 OF 2	
	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA	ML	L, MB, GS, ML	LRN, ML	NO GROUP	ALL CRAFT	
SOUTHWEST	ESTIMATE	2557	1201	14945	4091	2240	4285	68	54	16999	40332	
	% STD ERR	16.4	23.5	6.4	10.9	15.8	10.7	*	*	5.9	3.7	
	ROW %	6.3	3.0	37.1	10.1	5.6	10.6	0.2	0.1	42.1		
	COLUMN %	18.3	10.1	16.0	21.3	23.8	21.5	6.5	11.4	14.3	15.5	
WST-PACIFI	ESTIMATE	2793	2529	17992	2559	1525	2584	88	4	18957	44982	
	% STD ERR	15.6	16.1	5.8	13.8	19.2	13.7	*	*	5.3	3.4	
	ROW %	6.2	5.6	40.0	5.7	3.4	5.7	0.2	0.0	42.1		
	COLUMN %	17.8	21.3	19.3	13.3	16.2	12.9	8.5	0.8	15.9	17.3	
TOTALS	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	474	118857	260505	
	% STD ERR	8.1	7.1	1.7	3.9	6.7	3.8	24.3	33.2	1.3		
	ROW %	8.0	4.6	35.8	7.4	3.6	7.7	0.4	0.2	45.6		

KEY

GROUP

L: LOCALIZER

MB: MARKER BEACON

GS: GLIDE SLOPE

GROUP

RA: RADAR ALTIMETER

LRN: LONG RANGE RNAV

ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
 * STANDARD ERROR GREATER THAN 50 PERCENT.



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

February 1984

Dear Aircraft Owner:

Enclosed is the annual General Aviation Activity and Avionics Survey for calendar year 1983. Data collected in the survey will be used for performing safety analyses, for determining the demand for air traffic facilities and services, and for assessing the impact of proposed regulatory changes on the general aviation fleet.

The survey is being mailed to owners of a random sample of around 10 percent of all general aviation aircraft. Because the sample is random it is possible that more than one of your aircraft may be selected or that your aircraft may be selected in successive years. This may happen in particular when there are a small number of aircraft of the type that you own. When more than one of your aircraft are selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the aircraft identified. If you cannot determine precisely an answer to a question, please make your best estimate.

If your aircraft was not in use during the year (e.g., in storage, dismantled, destroyed, exported, etc.) please check item 5, indicating the aircraft was not flown. If the aircraft was sold prior to January 1983, it would be quite helpful if you would write a note indicating this on the survey questionnaire. If your aircraft is operated principally by another (leased, etc.), please obtain the necessary information from the operator or forward these materials to that person or firm for completion.

Please return this questionnaire in the enclosed self-addressed postpaid envelope within 10 days. Because the survey is based on a sample of general aviation aircraft, your response is especially important to the accuracy of the results. A prompt response will eliminate the need for additional follow-up contacts. A high response rate will ensure the continued use of sampling methods to collect activity and avionics data.

The data gathered from this survey will be used only to produce summary statistics and not to disclose individual operations on your aircraft. We appreciate your cooperation.

Sincerely,

Lawrence Kelly
Acting Manager, Management Standards
and Statistics Division, AMS-400

Enclosure





U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave. S.W.
Washington, D.C. 20591

March 1984

Dear Aircraft Owner:

In February the Federal Aviation Administration sent aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the aircraft owners selected at random to receive a questionnaire. As of this date, we have not received a response from you. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lawrence Kelly".

Lawrence Kelly
Acting Manager, Management Standards
and Statistics Division, AMS-400

Enclosure

1 CONTROL NUMBER



US Department of Transportation
Federal Aviation Administration

GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY (As of December 31, 1983)

FAA Form 1800-54
Rev. 1-83

This survey is administered by the Federal Aviation Administration. It is intended to provide information on general aviation activity. The information is used for planning and development of the Federal Aviation Administration. It is not to be used for statistical purposes and is not to be released for statistical purposes.

2. a. ☐ Yes, if this aircraft is an ultralight and GO TO QUESTION 4

b. ☐ No, if you operate your aircraft principally as an air carrier under FAR 121 or 125. If so, DO NOT complete remainder of form. However please return to address shown below.

3. AIRCRAFT CHARACTERISTICS

INSTRUCTIONS: Please print or type clearly. Do not use abbreviations. Do not use "etc." or "and so forth." Do not use "other" unless you specify.

Transportation Systems Center—GAF
Kendall Square
Cambridge, Massachusetts 02142

4. What were the total lifetime airframe hours as of December 31, 1983?

HOURS

5. Was aircraft flown in Calendar Year 1983?

1 ☐ Yes 2 ☐ No Skip to question 11

6. Did you own this aircraft for the entire year of 1983?

1 ☐ Yes 2 ☐ No

7. How many hours did this aircraft fly in each of the categories below during Calendar Year 1983?

HOURS

EXECUTIVE CORPORATE TRANSPORTATION-

Company flying with professional crew transporting company personnel, guests, and cargo.

a

BUSINESS TRANSPORTATION-Individual use of aircraft for business transportation.

b

PERSONAL-Individual flying for personal reasons.

c

INSTRUCTIONAL-Flying with or under the supervision of a flight instructor. excludes proficiency flying.

d

AERIAL APPLICATION-Agriculture, health, forestry, food, seeding, firefighting, insect control, etc.

e

AERIAL OBSERVATION-Aerial mapping, photography, survey, patrol, fish spotting, search and rescue, firefighting, wildlife advisory, sightseeing, and photography.

f

OTHER WORK USE-Construction work, aerial photography, aerial advertising, towing gliders, parachute rigging, etc.

g

COMMUTER AIR CARRIER-Performs at least two scheduled flights per week between two or more airports in calendar year.

h

DEMAND AIR TAXI-Air taxi for passengers and cargo operations, including charter and on-demand commuter.

i

OTHER-Experimental, R & D, testing, demonstration, government, air shows, air racing, etc.

j

AIRCRAFT RENTAL BUSINESS-Commercial flying for hire, charter and rental aircraft activity. Do not know the purpose of flight, assign hours to appropriate category if not other hours here.

k

8. In Calendar Year 1983, what percentage of the flying time for this aircraft was flown in each of the following conditions? a. b. c. d. e. f. g. h. i. j. k. l. m. n. o. p. q. r. s. t. u. v. w. x. y. z. TOTAL

100
PER HOURS

9. Was this aircraft flown on an Instrument Flight Plan in 1983?

1 ☐ Yes 2 ☐ No

If Yes, how many hours were flown on an Instrument Flight Plan?

PER HOURS

10. What was this aircraft's average rate of fuel consumption (gal./hr.) during 1983?

Report average only.

GAL. HR

11. In what state, territory, or foreign country was this aircraft based as of December 31, 1983?

STATE

12. AVIONICS EQUIPMENT CAPABILITY

X ALL boxes that reflect this aircraft's current capability. If none, check the last box in each group.

VHF COMMUNICATIONS EQUIPMENT

VHF Communications System

360 Channels or less

720 Channels or more

More than one comm. system

No VHF Communications Equipment

X

a

b

c

d

TRANSPONDER EQUIPMENT

4096 Code

Altitude Encoding Equipment

No Transponder Equipment

e

f

g

NAVIGATION EQUIPMENT

VOR Receiver

100 Channels

200 Channels

More than one VOR Receiver

Automatic Direction Finder (ADF)

Distance Measuring Equipment (DME)

Area Navigation Equipment (RNAV)

Long Range Nav. Doppler INS Other

Flight Director

Radar Altimeter

Flight Management Computer

No Navigation Equipment

h

i

j

k

l

m

n

o

p

q

r

ILS RECEIVING EQUIPMENT

Localizer

Marker Beacon

Glideslope

Microwave Landing System

No ILS Receiving Equipment

s

t

u

v

w

APPENDIX B

SAMPLE DESIGN

B.1 SAMPLE FRAME AND SIZE

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for three years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

- 1) The accuracy of owners' addresses deteriorated, causing the percentage of questionnaires returned by the post office to almost triple from 1977 to 1982. This partially accounted for the lower survey response rates experienced since 1977.
- 2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

- 1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and
- 2) aircraft owned by non-U.S. corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

- 1) Aircraft registered to dealers.
- 2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.
- 3) Aircraft with a known inaccurate owner's address.
- 4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1983, the sample frame consisted of 260,505 general aviation aircraft records from which 27,828 records were sampled, yielding a 10.7 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

B.2 DESCRIPTION OF SAMPLE DESIGN

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

- 1) State or territory of aircraft registration.
- 2) A variable called the make-model index constructed from a combination of the computed aircraft type, the Service Difficulty Reporting (SDR) aircraft manufacturer/model group, and the FAA make-model-series of the aircraft.

The 54 levels of the state criterion and the 268 levels of the make-model index yielded a matrix of 54 by 268 or 14,472 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells, yielding a final sample size of 27,828 general aviation aircraft.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, and which corresponded to the number of aircraft in the sample frame represented by that aircraft. When all responses to the survey

TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE

TYPE	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
Piston			
1 engine, 1-3 seats	84,221	9,783	11.6
1 engine, 4+ seats	119,549	9,377	7.8
2 engines, 1-6 seats	18,691	1,784	9.5
2 engines, 7+ seats	10,130	2,303	22.7
Other Piston	327	289	88.4
Turboprop			
2 engines, 1-12 seats	4,868	310	6.4
2 engines, 13+ seats	669	57	8.5
Other Turboprop	204	53	26.0
Turbojet			
2 engines	3,655	157	4.3
Other Turbojet	720	84	11.7
Rotorcraft			
Piston	5,413	1,657	30.6
Turbine	4,582	625	13.6
Other	7,476	1,349	18.1
TOTAL	260,505	27,828	10.7

TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	7,588	1,463	19.3
Central	14,981	1,760	11.7
Eastern	29,193	3,245	11.1
European (Foreign)	543	93	17.1
Great Lakes	46,249	4,179	9.0
New England	9,578	2,145	22.4
Northwest Mountain	27,432	2,711	9.9
Southern	39,431	4,745	12.0
Southwestern	40,703	2,360	5.8
Western-Pacific	44,695	5,126	11.5
TOTAL	260,505	27,828	10.7

Note: Column summations may differ from printed totals due to estimation procedures.

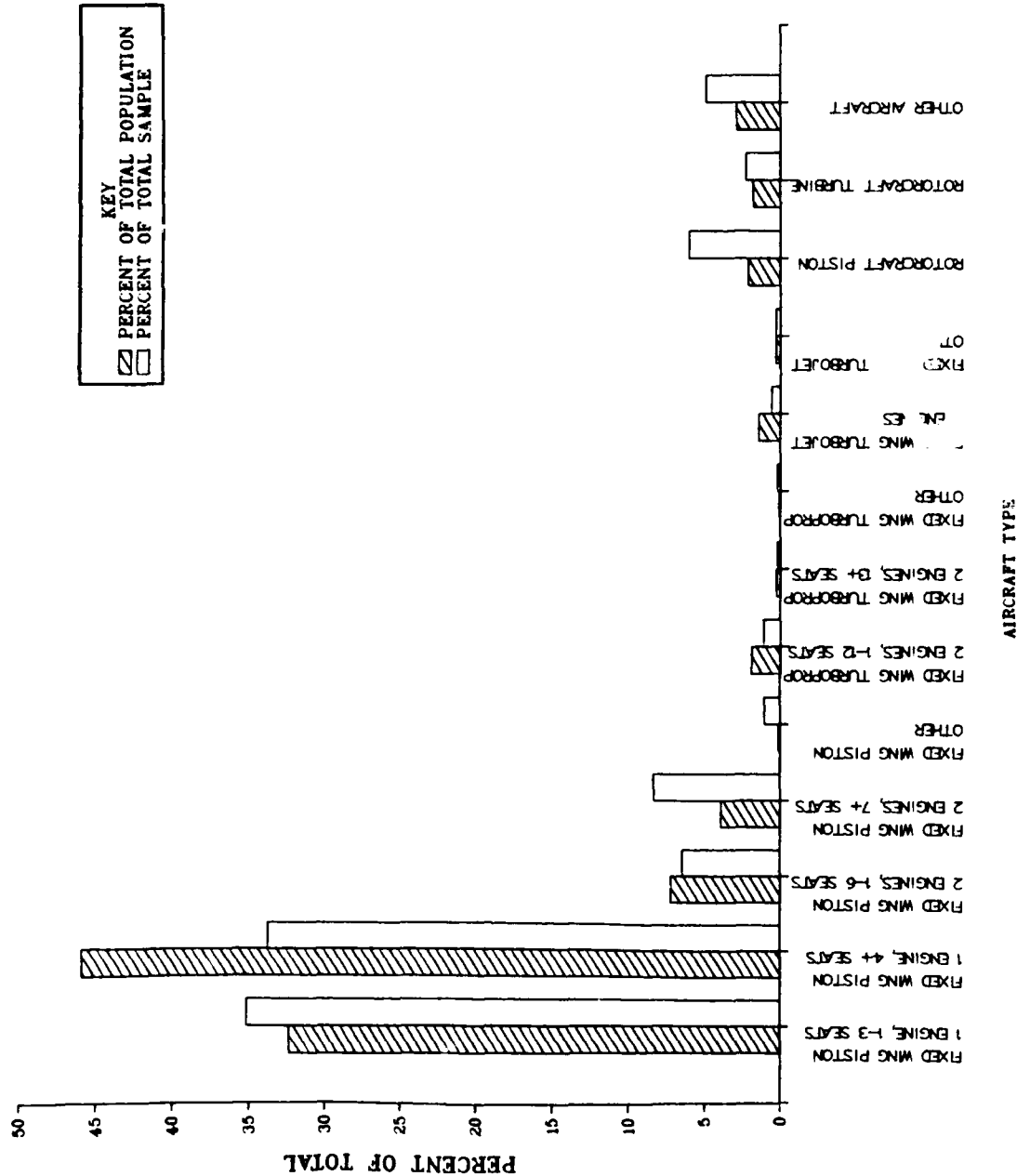


FIGURE B.1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE

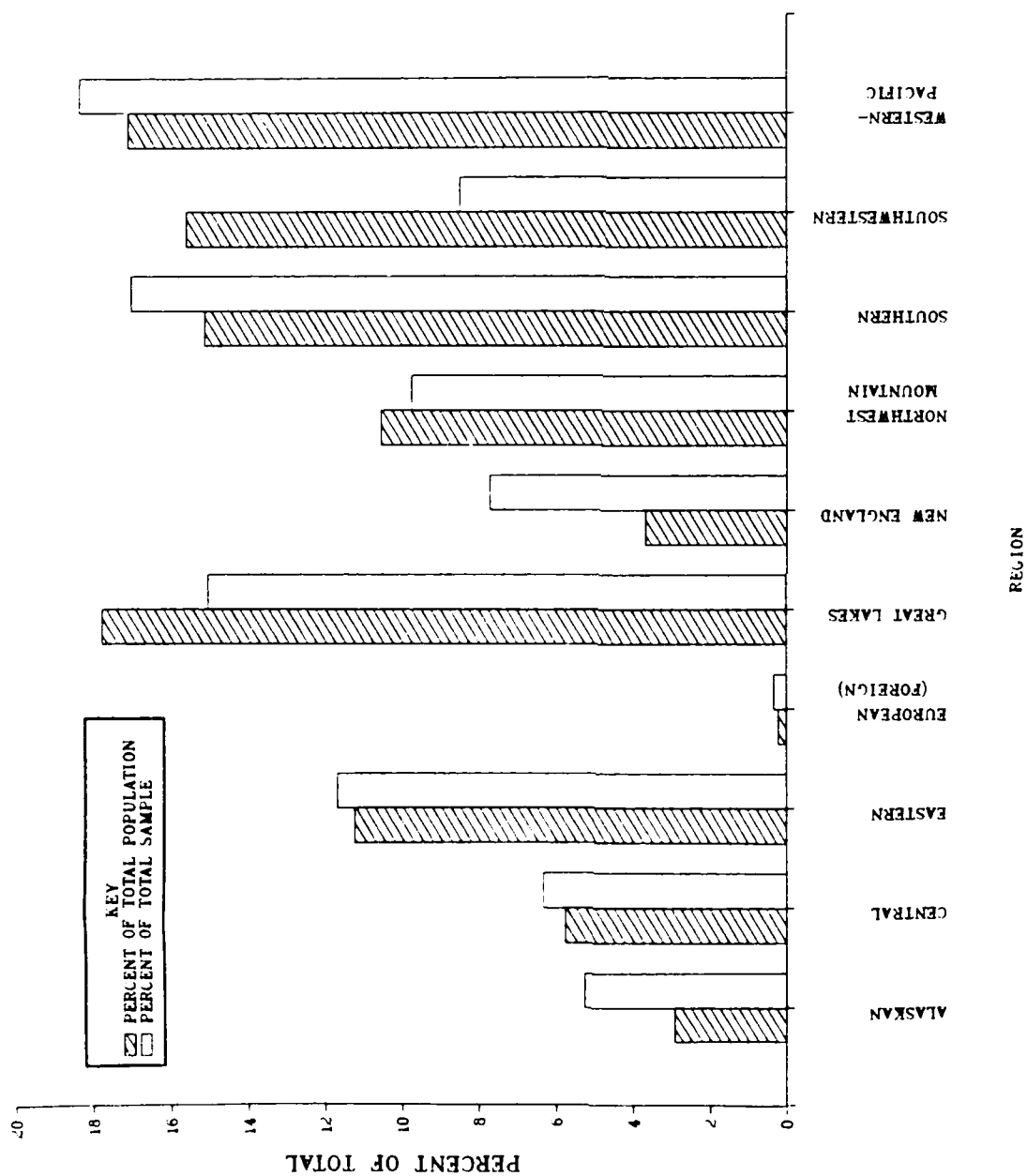


FIGURE B.2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

were tallied, each weight was adjusted according to the response rate for the cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

- 1) Non-respondents' weights were changed to zero.
- 2) The weights of all responding aircraft were adjusted uniformly by dividing the initial weight by the response rate for the cell.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures.

B.3 ERROR

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors.¹ Sampling errors occur because the estimates are based on a sample — not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

B.3.1 Sampling Error

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean characteristics, annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model characteristics, and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for all estimated quantities. In some cases, the tables contain the percent standard error, which is the standard error multiplied by one hundred divided by the corresponding estimate.

¹Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14.

The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be $2541 \pm 2(191)$ or (2159, 2923). One would say that the number of active rotorcraft with piston engines lies somewhere between 2159 and 2923 with 95 percent confidence.

B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- o A second mailing to non-respondents was conducted in addition to the original mailing to improve the response rate, since a low response rate is a major cause of non-sampling error. Sixty-two percent of those aircraft sampled responded to a least one question of the survey. The 1983 rate marks a decline over the 80 percent response achieved in 1977, the first year of the survey. Possible causes of the decrease include:
 - 1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This caused a gradual increase in the percentage of questionnaires returned undelivered by the postmaster from around 1.6% in 1977 to 6.8% in 1981, hence decreasing the response rate. The percentage of postmaster returns for 1983 (5.7%) shows a slight decline from the 1981 level, but is still significantly higher than in 1977.

- 2) Repeated sampling of aircraft in two and possibly three or four successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer/model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1983 than in previous years.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. The lowest response rate for any region was 36% for the European (Foreign) region due to mail delivery difficulties. The Alaskan Region rate was low at 51% for similar reasons. These two regions together, however, represented only about 3% of the U.S. general aviation fleet. Two aircraft types had response rates of less than 50%, fixed wing twin engine piston aircraft with 7 or more seats, and the other fixed wing piston group. These two groups represent, however, only 4% of the fleet.

- o The survey questionnaire was designed and tested to minimize misinterpretation of questions by the aircraft owners.
- o To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."¹
- o Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.
- o The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

¹See Appendix A.1.

TABLE B-4. RESPONSE RATES BY REGION

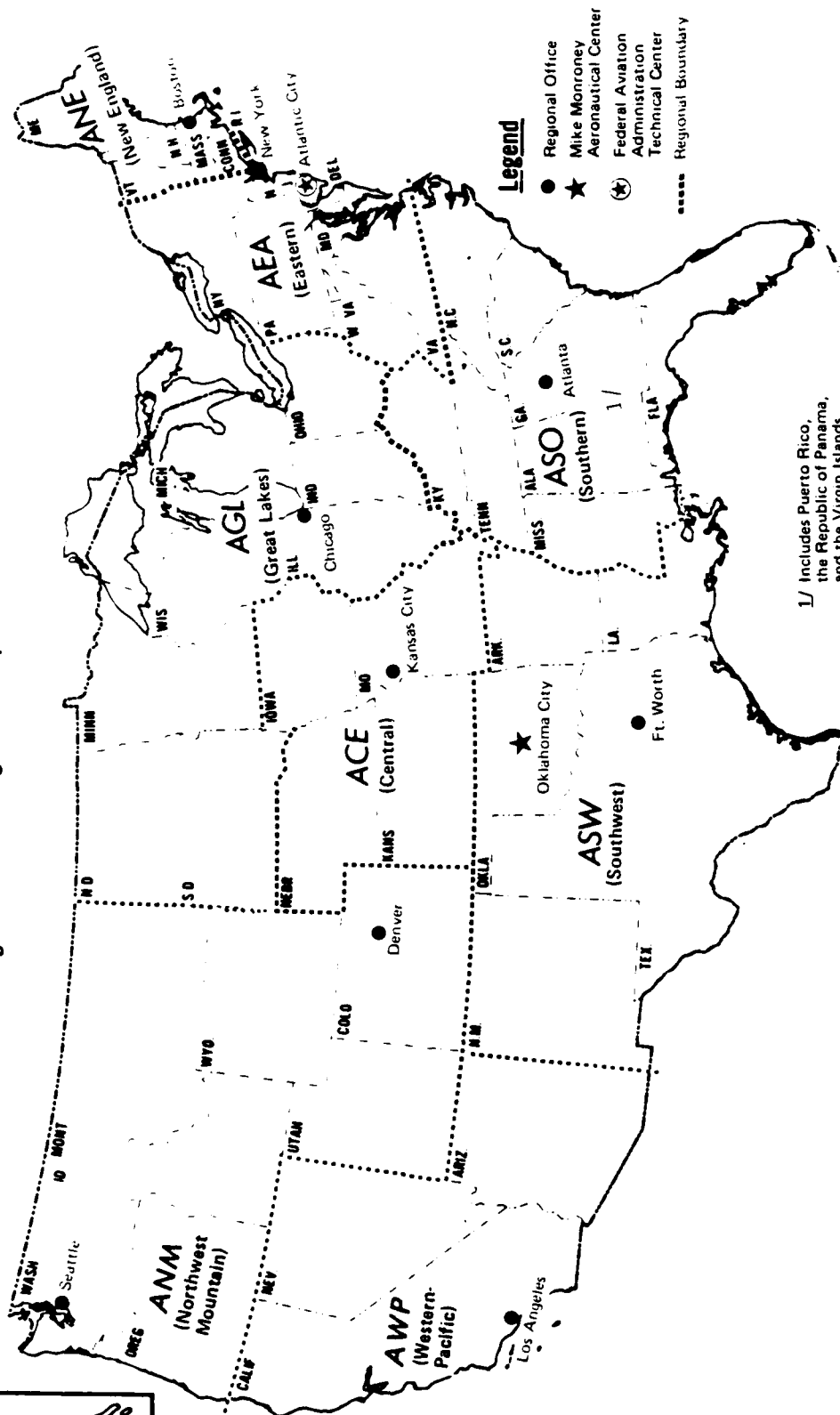
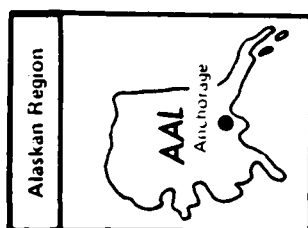
REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	51	New England	67
Central	68	Northwest Mountain	61
Eastern	65	Southern	57
European (Foreign)	36	Southwestern	60
Great Lakes	70	Western-Pacific	62
		<hr/>	
		TOTAL	62

TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	67	2 engines	65
1 engine, 4+ seats	63	Other	63
2 engines, 1-6 seats	61		
2 engines, 7+ seats	48	Rotorcraft	
Other	43	Piston	60
Turboprop		Turbine	57
2 engines, 1-12 seats	62	Other	62
2 engines, 13+ seats	68	<hr/>	
Other	55	TOTAL	62

APPENDIX C. FAA REGIONAL BOUNDARIES

U.S. DEPARTMENT OF TRANSPORTATION Federal Aviation Administration FAA REGIONAL BOUNDARIES Including Locations of Regional Headquarters and Centers



APPENDIX D

SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ADAMS A50S	0050101	ARCTICS181	1850302	BALWKSFIREFY	1050101
ADAMS A50S	0050105	ARCTICS181	1850304	BALWKSFIREFY	1050103
ADAMS A50S	0050103	ARCTICS181	1850306	BALWKSFIREFY	1050104
AERORSJ2	5500604	ARCTICS181	1850308	BALWKSFIREFY	1050107
AEROSPAS355	8680805	ARCTICS181	1850310	BALWKSFIREFY	1050109
AEROSPAS355	8680806	ARCTICS181	1850312	BALWKSFIREFY	10501A9
AEROSPSA316	8680207	ARONCA15	0191202	BEECH 100	*100
AEROSPSA316	8680512	ARONCA15	0191204	BEECH 100	1152915
AEROSPSA316	8680513	ARONCA58	0191002	BEECH 100	1152916
AEROSPSA316	8680515	ARONCA58	0191004	BEECH 100	1152917
AEROSPSA316	8680605	ARONCA58	0191008	BEECH 100	1152919
AEROSPSA316	8680615	ARONCA58	0191008	BEECH 17	1150502
AGUSTAA109	0260109	ARONCA58	0191010	BEECH 17	1150504
AIRPTSA	0144202	ARONCA58	0191012	BEECH 17	1150506
AIRPTSA	0144204	ARONCA65	0190802	BEECH 17	1150508
AIRPTSA	0144206	ARONCA65	0190902	BEECH 17	1150510
AIRPTSA	1850102	ARONCA65	0190904	BEECH 17	1150512
AIRPTSA	1850104	ARONCA65	0190906	BEECH 17	1150514
AIRPTSA	1850106	ARONCA65	0190908	BEECH 17	1150516
AIRPTSA	1850108	ARONCA65	0190910	BEECH 17	1150518
AIRPTSA	1850110	ARONCA65	0190912	BEECH 17	1150520
AIRPTSA	1850112	ARONCA65	0190914	BEECH 17	1150522
AIRPTSA	1850114	ARONCA65	0190916	BEECH 17	1150524
AIRPTSA	1850116	ARONCA65	0190918	BEECH 17	1150526
AIRPTSA	1850118	ARONCA65	0191014	BEECH 17	1150528
AIRPTSA	1850120	ARONCA65	0191016	BEECH 17	1150530
AIRPTSA	1850122	ARONCAC3	0190302	BEECH 17	1150532
AIRPTSA	4570424	ARONCAC3	0190304	BEECH 17	1150534
AIRPTSA	4570602	AVIANWFALCON	0900102	BEECH 17	1150536
AIRPTSA	4570604	AVIANWSKYHWK	0900104	BEECH 17	1150538
AIRPTSA	4570606	AYRES S2	0143002	BEECH 17	1150540
AIRPTSA	4570608	AYRES S2	0143004	BEECH 17	1150542
AIRPTSA	4570610	AYRES S2	0143006	BEECH 17	1150544
AIRPTSA	4570612	AYRES S2	0143008	BEECH 17	1150546
AIRPTSA	4570614	AYRES S2	0143010	BEECH 17	1150548
AIRPTSA	4570616	AYRES S2	0143012	BEECH 17	1150550
AIRPTSA	4570618	AYRES S2	0143022	BEECH 17	1150552
AIRPTSA	4570620	AYRES S2	0970100	BEECH 17	1150554
AIRPTSA	4570622	AYRES S2	0970101	BEECH 17	1150556
AIRPTSA	4570624	AYRES S2	0970104	BEECH 17	1150558
AIRSPC18	0440102	AYRES S2	0970105	BEECH 17	1150560
AIRSPC18	0440104	AYRES S2	0970107	BEECH 17	1150562
AIRSPC18	9200202	AYRES S2	0970202	BEECH 17	1150564
AIRTRCAT300	0390101	AYRES S2	0970210	BEECH 18	*18
AIRTRCAT300	0390103	AYRES S2	0970215	BEECH 18	1150202
AIRTRCAT300	0390104	AYRES S2	7630202	BEECH 18	1150204
AIRTRCAT400	0390202	AYRES S2	7630203	BEECH 18	1150602
AIRTRCAT400	0390203	AYRES S2	8380202	BEECH 18	1150604
AMD FALC10	*FALC10	AYRES S2	8380204	BEECH 18	1150702
AMD FALC10	2730101	AYRES S2	8380206	BEECH 18	1150704
AMD FALC20	*FALC20	AYRES S2	8380302	BEECH 18	1150706
AMD FALC20	2720302	AYRES S2	8380306	BEECH 18	1150708
AMD FALC20	2720303	AYRES S2T	0970106	BEECH 18	1150710
AMD FALC20	2720304	BAC 111	*111	BEECH 18	1150712
AMD FALC20	2720305	BAC 111	1480202	BEECH 18	1150802
AMD FALC20	2720306	BAC 111	1480204	BEECH 18	1150804
AMD FALC20	2730103	BAC 111	1480208	BEECH 18	1150806
AMD FALC50	2730106	BAC 111	1480210	BEECH 18	1150808
AMTR TMK	4220120	BAC 111	1480218	BEECH 18	1150902
ARCRNEH37	8141617	BAC 111	1480221	BEECH 18	1150904
ARCRNEH37	8142801	BAC 111	1480264	BEECH 18	1150906
ARCTICS1A	1850202	BAC 111	1480268	BEECH 18	1150908
ARCTICS1A	1850204	BAC 111	1480270	BEECH 18	1150909
ARCTICS1A	1850206	BAC 111	1480273	BEECH 18	1150910
ARCTICS1A	1850208	BAC 111	1480277	BEECH 18	1150911
ARCTICS1A	1850210	BAC 111	1480283	BEECH 18	1150912
ARCTICS1A	1850212	BAG B206	1121223	BEECH 18	1150913
ARCTICS1A	1850214	BAG B206	1121224	BEECH 18	1150914
ARCTICS1A	1850216	BALWKSFIREFY	1050100	BEECH 18	1150916

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BEECH 18	1150918	BEECH 18	1151004	BEECH 18	1151014
BEECH 18	1150920	BEECH 18	1151006	BEECH 18	1151015
BEECH 18	1150922	BEECH 18	1151007	BEECH 18	1151016
BEECH 18	1150924	BEECH 18	1151008	BEECH 18	1151018
BEECH 18	1150926	BEECH 18	1151009	BEECH 18	1151019
BEECH 18	1150928	BEECH 18	1151010	BEECH 18	1151020
BEECH 18	1150930	BEECH 18	1151011	BEECH 18	1151021
BEECH 18	1151001	BEECH 18	1151012	BEECH 18	1151022
BEECH 18	1151002	BEECH 18	1151013	BEECH 18	1151023
BEECH 18	1151004	BEECH 18	1151014	BEECH 18	1151024
BEECH 18	1151006	BEECH 18	1151015	BEECH 18	1151026
BEECH 18	1151007	BEECH 18	1151016	BEECH 18	1151040
BEECH 18	1151008	BEECH 18	1151018	BEECH 18	1151042
BEECH 18	1151009	BEECH 18	1151019	BEECH 18	1151044
BEECH 18	1151010	BEECH 18	1151020	BEECH 18	1151046
BEECH 18	1151011	BEECH 18	1151021	BEECH 200	*200
BEECH 18	1151012	BEECH 18	1151022	BEECH 200	1152920
BEECH 18	1151013	BEECH 18	1151023	BEECH 200	1152922
BEECH 18	1151014	BEECH 18	1151024	BEECH 200	1152924
BEECH 18	1151015	BEECH 18	1151026	BEECH 200	1152926
BEECH 18	1151016	BEECH 18	1151040	BEECH 200	1152928
BEECH 18	1151018	BEECH 18	1151042	BEECH 200	1152921
BEECH 18	1151019	BEECH 18	1151044	BEECH 200	1152929
BEECH 18	1151020	BEECH 18	1151046	BEECH 23	1151202
BEECH 18	1151021	BEECH 18	*18	BEECH 23	1151204
BEECH 18	1151022	BEECH 18	1150202	BEECH 23	1151208
BEECH 18	1151023	BEECH 18	1150204	BEECH 23	1151212
BEECH 18	1151024	BEECH 18	1150602	BEECH 23	1151214
BEECH 18	1151026	BEECH 18	1150604	BEECH 23	1151215
BEECH 18	1151040	BEECH 18	1150702	BEECH 23	1151216
BEECH 18	1151042	BEECH 18	1150704	BEECH 23	1151226
BEECH 18	1151044	BEECH 18	1150706	BEECH 23	1151240
BEECH 18	1151046	BEECH 18	1150708	BEECH 23	1151242
BEECH 18	*18	BEECH 18	1150710	BEECH 23	1151250
BEECH 18	1150202	BEECH 18	1150712	BEECH 23	1151252
BEECH 18	1150204	BEECH 18	1150802	BEECH 23	1151253
BEECH 18	1150602	BEECH 18	1150804	BEECH 23	1151254
BEECH 18	1150604	BEECH 18	1150806	BEECH 33	1151402
BEECH 18	1150702	BEECH 18	1150808	BEECH 33	1151404
BEECH 18	1150704	BEECH 18	1150902	BEECH 33	1151406
BEECH 18	1150706	BEECH 18	1150904	BEECH 33	1151408
BEECH 18	1150708	BEECH 18	1150906	BEECH 33	1151410
BEECH 18	1150710	BEECH 18	1150908	BEECH 33	1151422
BEECH 18	1150712	BEECH 18	1150909	BEECH 33	1151423
BEECH 18	1150802	BEECH 18	1150910	BEECH 33	1151424
BEECH 18	1150804	BEECH 18	1150911	BEECH 33	1151425
BEECH 18	1150806	BEECH 18	1150912	BEECH 33	1151432
BEECH 18	1150808	BEECH 18	1150913	BEECH 33	1151434
BEECH 18	1150902	BEECH 18	1150914	BEECH 33	1151435
BEECH 18	1150904	BEECH 18	1150916	BEECH 35	1151502
BEECH 18	1150906	BEECH 18	1150918	BEECH 35	1151504
BEECH 18	1150908	BEECH 18	1150920	BEECH 35	1151506
BEECH 18	1150909	BEECH 18	1150922	BEECH 35	1151508
BEECH 18	1150910	BEECH 18	1150924	BEECH 35	1151510
BEECH 18	1150911	BEECH 18	1150926	BEECH 35	1151512
BEECH 18	1150912	BEECH 18	1150928	BEECH 35	1151514
BEECH 18	1150913	BEECH 18	1150930	BEECH 35	1151516
BEECH 18	1150914	BEECH 18	1151001	BEECH 35	1151518
BEECH 18	1150916	BEECH 18	1151002	BEECH 35	1151520
BEECH 18	1150918	BEECH 18	1151004	BEECH 35	1151522
BEECH 18	1150920	BEECH 18	1151006	BEECH 35	1151524
BEECH 18	1150922	BEECH 18	1151007	BEECH 35	1151526
BEECH 18	1150924	BEECH 18	1151008	BEECH 35	1151528
BEECH 18	1150926	BEECH 18	1151009	BEECH 35	1151530
BEECH 18	1150928	BEECH 18	1151010	BEECH 35	1151532
BEECH 18	1150930	BEECH 18	1151011	BEECH 35	1151538
BEECH 18	1151001	BEECH 18	1151012	BEECH 35	1151540
BEECH 18	1151002	BEECH 18	1151013	BEECH 35	1151544

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BEECH 35	1151548	BEECH 90	1152908	BELL 47	1180902
BEECH 35	1151548	BEECH 90	1152909	BELL 47	1180904
BEECH 35	1151550	BEECH 90	1152912	BELL 47	1181001
BEECH 36	1151602	BEECH 90	1152914	BELL 47	1181002
BEECH 36	1151603	BEECH 90	1153409	BELL 47	1181003
BEECH 36	1151604	BEECH 90	1152913	BELL 47	1181005
BEECH 36	1151605	BEECH 95	1153402	BELL 47	1181006
BEECH 36	1151606	BEECH 95	1153404	BELL 47	1181008
BEECH 36	1151607	BEECH 95	1153406	BELL 47	1181009
BEECH 36	1151609	BEECH 95	1153408	BELL 47	118100V
BEECH 45	1152002	BEECH 95	1153410	BELL 47	1181010
BEECH 45	1152004	BEECH 99	*99	BELL 47	1181011
BEECH 45	1152006	BEECH 99	1153802	BELL 47	1181012
BEECH 45	1152008	BEECH 99	1154002	BELL 47	1181013
BEECH 45	1152010	BEECH 99	1154004	BELL 47	1181014
BEECH 45	1152012	BEECH 99	1154006	BELL 47	1181016
BEECH 45	1152013	BEECH 99	1154003	BELL 47	1181023
BEECH 45	1152014	BELL 204	1181404	BELL 47	1181024
BEECH 50	1152502	BELL 204	1181405	BELL 47	1181025
BEECH 50	1152504	BELL 204	1181406	BELL 47	1181026
BEECH 50	1152506	BELL 204	1181408	BELL 47	1181027
BEECH 50	1152508	BELL 204	1181410	BELL 47	1181028
BEECH 50	1152510	BELL 204	1181411	BELL 47	1181029
BEECH 50	1152512	BELL 204	1181401	BELL 47	1181030
BEECH 50	1152514	BELL 204	1181407	BELL 47	1181031
BEECH 50	1152516	BELL 204	118141M	BELL 47	1181032
BEECH 50	1152518	BELL 205	1181413	BELL 47	1181033
BEECH 50	1152520	BELL 205	1181414	BELL 47	1181034
BEECH 50	1152522	BELL 206	1181502	BELL 47	118103M
BEECH 50	1152524	BELL 206	1181503	BELL 47	118103Z
BEECH 50	1152526	BELL 206	1181504	BELL 47	1181060
BEECH 50	1152528	BELL 206	1181506	BELL 47	1181061
BEECH 50	1152530	BELL 206	1181508	BELL 47	1181062
BEECH 50	1152532	BELL 206	1181510	BELL 47	1181063
BEECH 50	1152534	BELL 206	1181511	BELL 47	1181064
BEECH 50	1152536	BELL 206	1181522	BELL 47	1181065
BEECH 55	*55	BELL 206	1181579	BELL 47	1181066
BEECH 55	1152702	BELL 206	1182107	BELL 47	1181068
BEECH 55	1152704	BELL 206	1182108	BELL 47	1181069
BEECH 55	1152706	BELL 212	1181420	BELL 47	1181070
BEECH 55	1152708	BELL 222	1182122	BELL 47	1181071
BEECH 55	1152729	BELL 412	1182202	BELL 47	1181073
BEECH 55	1152730	BELL 47	1180602	BELL 47	1181102
BEECH 55	1152732	BELL 47	1180604	BELL 47	1181103
BEECH 56	1152736	BELL 47	1180606	BELL 47	1181104
BEECH 56	1152738	BELL 47	1180702	BELL 47	1181106
BEECH 56	*56	BELL 47	1180704	BELL 47	1181202
BEECH 58	1152740	BELL 47	1180802	BELL 47	1181310
BEECH 58	1152744	BELL 47	1180808	BELL 47	1181403
BEECH 58	1152746	BELL 47	1180809	BELL 47	2390101
BEECH 60	1153602	BELL 47	1180810	BELL 47	2390301
BEECH 60	1153604	BELL 47	1180812	BELL 47	8930102
BEECH 60	1153605	BELL 47	1180813	BELL 47	8930103
BEECH 65	*65	BELL 47	1180814	BELL 47	8930105
BEECH 65	1152802	BELL 47	1180816	BLANCA11	0191102
BEECH 65	1152803	BELL 47	1180820	BLANCA11	0191104
BEECH 65	1152804	BELL 47	1180822	BLANCA11	0191106
BEECH 65	1152805	BELL 47	1180843	BLANCA11	0191108
BEECH 76	*76	BELL 47	1180844	BLANCA11	0191110
BEECH 76	1153005	BELL 47	1180845	BLANCA11	0191112
BEECH 77	1153007	BELL 47	118084C	BLANCA11	9140404
BEECH 80	*80	BELL 47	118084E	BLANCA11	9140408
BEECH 80	1152806	BELL 47	118084G	BLANCA1413	1201002
BEECH 80	1152807	BELL 47	118084H	BLANCA1413	1201004
BEECH 80	1152808	BELL 47	118084K	BLANCA1413	1201006
BEECH 80	1152809	BELL 47	118084M	BLANCA1413	1201008
BEECH 80	1152812	BELL 47	118084P	BLANCA1419	1220402
BEECH 90	*90	BELL 47	118084R	BLANCA1419	1220404
BEECH 90	1152907	BELL 47	118084V	BLANCA1419	1220406

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BLANCA1419	1220408	BLANCA7	21101M2	BLANCA7	21101M8
BLANCA1419	3080102	BLANCA7	21101M6	BLANCA7	21101MA
BLANCA1419	3080104	BLANCA7	21101MA	BLANCA7	21101MF
BLANCA1419	3080106	BLANCA7	21101MF	BLANCA7	21101ML
BLANCA1419	3080108	BLANCA7	21101ML	BLANCA7	21101MR
BLANCA1419	3080112	BLANCA7	21101MR	BLANCA7	21101MW
BLANCA1419	3080114	BLANCA7	21101MW	BLANCA7	21101N2
BLANCA1419	3080116	BLANCA7	21101N2	BLANCA7	21101N7
BLANCA1419	3080118	BLANCA7	21101N7	BLANCA7	21101N8
BLANCA1419	3080122	BLANCA7	21101N8	BLANCA7	21101NB
BLANCA1419	3080124	BLANCA7	21101NB	BLANCA7	21101NG
BLANCA1419	3080126	BLANCA7	21101NG	BLANCA7	21101NM
BLANCA1419	3080128	BLANCA7	21101NM	BLANCA7	21101NN
BLANCA1419	4580802	BLANCA7	21101NN	BLANCA7	21101NS
BLANCA1419	4580804	BLANCA7	21101NS	BLANCA7	21101NX
BLANCA1419	4580806	BLANCA7	21101NX	BLANCA7	21101P3
BLANCA1419	4580808	BLANCA7	21101P3	BLANCA7	21101PC
BLANCA17	1220432	BLANCA7	21101PC	BLANCA7	21101PH
BLANCA17	1220433	BLANCA7	21101PH	BLANCA7	21101PK
BLANCA17	1220434	BLANCA7	21101PK	BLANCA7	21101PN
BLANCA17	1220435	BLANCA7	21101PN	BLANCA7	21101PT
BLANCA17	1220436	BLANCA7	21101PT	BLANCA7	21101PY
BLANCA17	1220437	BLANCA7	21101PY	BLANCA8	1220801
BLANCA17	1220940	BLANCA7	0190107	BLANCA8	1220803
BLANCA7	0190107	BLANCA7	1220438	BLANCA8	2110612
BLANCA7	1220438	BLANCA7	1220480	BNORM BN2	*BN2
BLANCA7	1220460	BLANCA7	1220501	BNORM BN2	1520202
BLANCA7	1220501	BLANCA7	1220601	BNORM BN2	1520204
BLANCA7	1220601	BLANCA7	1220701	BNORM BN2	1520206
BLANCA7	1220701	BLANCA7	2110102	BNORM BN2	1520207
BLANCA7	2110102	BLANCA7	2110104	BNORM BN2	1520209
BLANCA7	2110104	BLANCA7	2110106	BNORM BN2	1520210
BLANCA7	2110106	BLANCA7	2110108	BNORM BN2	1520215
BLANCA7	2110108	BLANCA7	2110110	BNORM BN2	1520220
BLANCA7	2110110	BLANCA7	2110112	BNORM BN2	1520221
BLANCA7	2110112	BLANCA7	2110114	BNORM BN2	1520226
BLANCA7	2110114	BLANCA7	2110116	BNORM BN2	1520227
BLANCA7	2110116	BLANCA7	2110118	BNORM BN2	1520302
BLANCA7	2110118	BLANCA7	2110120	BNORM BN2	1520350
BLANCA7	2110120	BLANCA7	2110122	BNORM BN2	7080221
BLANCA7	2110122	BLANCA7	2110124	BNORM BN2	7080227
BLANCA7	2110124	BLANCA7	2110126	BNORM BN2	1520205
BLANCA7	2110126	BLANCA7	2110128	BOEING707	*707
BLANCA7	2110128	BLANCA7	2110130	BOEING707	138360H
BLANCA7	2110130	BLANCA7	2110132	BOEING707	138360K
BLANCA7	2110132	BLANCA7	2110133	BOEING707	138360N
BLANCA7	2110133	BLANCA7	2110134	BOEING707	138360P
BLANCA7	2110134	BLANCA7	2110136	BOEING707	138360T
BLANCA7	2110136	BLANCA7	2110138	BOEING707	1383612
BLANCA7	2110138	BLANCA7	2110140	BOEING707	1383614
BLANCA7	2110140	BLANCA7	2110142	BOEING707	1383616
BLANCA7	2110142	BLANCA7	2110144	BOEING707	1383618
BLANCA7	2110144	BLANCA7	2110146	BOEING707	138361G
BLANCA7	2110146	BLANCA7	2110148	BOEING707	138365B
BLANCA7	2110148	BLANCA7	2110150	BOEING707	138365D
BLANCA7	2110150	BLANCA7	2110152	BOEING707	138365F
BLANCA7	2110152	BLANCA7	2110154	BOEING707	138365H
BLANCA7	2110154	BLANCA7	2110156	BOEING707	138365K
BLANCA7	2110156	BLANCA7	2110158	BOEING707	1383660
BLANCA7	2110158	BLANCA7	2110160	BOEING707	138366B
BLANCA7	2110160	BLANCA7	2110162	BOEING707	138366B
BLANCA7	2110162	BLANCA7	2110164	BOEING707	138366C
BLANCA7	2110164	BLANCA7	2110166	BOEING707	138366D
BLANCA7	2110166	BLANCA7	2110168	BOEING707	138366F
BLANCA7	2110168	BLANCA7	2110170	BOEING707	138366H
BLANCA7	2110170	BLANCA7	2110172	BOEING707	138366K
BLANCA7	2110172	BLANCA7	2110174	BOEING707	138366M
BLANCA7	2110174	BLANCA7	2110176	BOEING707	138366P
BLANCA7	2110176	BLANCA7	21101M2	BOEING707	1383677

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BOEING707	138367A	BOEING727	1384017	BOEING737	1384457
BOEING707	138367B	BOEING727	1384018	BOEING737	1384458
BOEING707	138367C	BOEING727	1384019	BOEING737	1384459
BOEING707	138367D	BOEING727	1384025	BOEING737	1384460
BOEING707	138367E	BOEING727	1384027	BOEING737	1384461
BOEING707	138367F	BOEING727	1384028	BOEING737	1384469
BOEING707	138367G	BOEING727	138402C	BOEING737	138446R
BOEING707	138367H	BOEING727	1384030	BOEING737	1384473
BOEING707	138367J	BOEING727	1384032	BOEING737	1384477
BOEING707	138367K	BOEING727	1384035	BOEING737	1384478
BOEING707	138367L	BOEING727	1384036	BOEING737	1384479
BOEING707	138367M	BOEING727	1384041	BOEING737	1384480
BOEING707	138367N	BOEING727	1384043	BOEING737	1384484
BOEING707	138367P	BOEING727	1384044	BOEING737	1384488
BOEING707	138367Q	BOEING727	138404G	BOEING737	138448A
BOEING707	138367R	BOEING727	138404V	BOEING737	138448B
BOEING707	138367S	BOEING727	138404Z	BOEING737	138448C
BOEING707	138367T	BOEING727	1384056	BOEING737	138448D
BOEING707	138367W	BOEING727	1384057	BOEING737	138448E
BOEING707	138367X	BOEING727	1384058	BOEING737	138448F
BOEING707	138367Y	BOEING727	1384059	BOEING737	138448G
BOEING707	138368B	BOEING727	1384063	BOEING737	138448J
BOEING707	138368D	BOEING727	1384067	BOEING737	138448M
BOEING707	138368F	BOEING727	138406G	BOEING737	138448P
BOEING707	138368H	BOEING727	138406N	BOEING737	138448R
BOEING707	138368K	BOEING727	1384071	BOEING737	138448S
BOEING707	138368M	BOEING727	1384072	BOEING737	138448T
BOEING720	*720	BOEING727	1384073	BOEING737	138448V
BOEING720	1383802	BOEING727	1384074	BOEING737	138448W
BOEING720	1383804	BOEING727	1384075	BOEING737	138448X
BOEING720	1383810	BOEING727	1384076	BOEING737	138448Y
BOEING720	1383818	BOEING727	1384077	BOEING737	1384492
BOEING720	1383822	BOEING727	1384078	BOEING737	1384494
BOEING720	1383826	BOEING727	1384079	BOEING737	1384550
BOEING720	1383830	BOEING727	138407E	BOEING737	1384560
BOEING720	1383841	BOEING727	138407F	BOEING747	*747
BOEING720	1383845	BOEING727	138407G	BOEING747	1384802
BOEING720	1383849	BOEING727	138407K	BOEING747	1384804
BOEING720	1383853	BOEING727	138407L	BOEING747	1384810
BOEING720	1383857	BOEING727	138407M	BOEING747	1384813
BOEING720	1383861	BOEING727	138407N	BOEING747	1384815
BOEING720	1383865	BOEING727	138407P	BOEING747	1384820
BOEING720	1383869	BOEING727	138407Q	BOEING747	1384849
BOEING720	1383873	BOEING727	138407R	BOEING747	1384866
BOEING720	1383877	BOEING727	138407S	BOEING747	1384868
BOEING727	*727	BOEING727	138407T	BOEING747	1384869
BOEING727	1384001	BOEING727	138407W	BOEING747	1384871
BOEING727	1384002	BOEING727	138407Z	BOEING747	1384872
BOEING727	1384003	BOEING727	1384080	BOEING747	1384873
BOEING727	1384004	BOEING727	1384082	BOEING747	1384874
BOEING727	1384005	BOEING727	1384084	BOEING747	1384881
BOEING727	1384006	BOEING727	138408B	BOEING747	1384882
BOEING727	1384008	BOEING727	138408F	BOEING747	1384885
BOEING727	138400B	BOEING727	138408H	BOEING747	1384886
BOEING727	138400C	BOEING727	138408J	BOEING747	1384888
BOEING727	138400E	BOEING727	138408L	BOEING747	1384890
BOEING727	138400F	BOEING727	138408M	BOEING747	1384891
BOEING727	138400H	BOEING727	138408N	BOEING747	1384892
BOEING727	138400J	BOEING727	138408W	BOEING747	1384893
BOEING727	138400K	BOEING727	138408X	BOEING747	1384894
BOEING727	138400M	BOEING727	13840X2	BOEING747	1384895
BOEING727	1384010	BOEING727	13840XY	BOEING747	1384896
BOEING727	1384011	BOEING737	*737	BOEING747	1384897
BOEING727	1384012	BOEING737	1384404	BOEING747	1384898
BOEING727	1384013	BOEING737	1384435	BOEING747	1384899
BOEING727	1384014	BOEING737	1384438	BOEING747	1384902
BOEING727	1384015	BOEING737	1384453	BOEING747	1384903
BOEING727	1384016	BOEING737	1384454	BOEING747	1384807

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BOEING747	1384823	CASA C212	2410304	CESSNA180	2072618
BOEING747	1384856	CASA C212	2410202	CESSNA180	2072618
BOEING75	1380102	CESSNA120	2071402	CESSNA180	2072622
BOEING75	1380104	CESSNA140	2071602	CESSNA180	2072624
BOEING75	1380106	CESSNA140	2071604	CESSNA182	2072702
BOEING75	1380108	CESSNA150	*150	CESSNA182	2072704
BOEING75	1380110	CESSNA150	2071802	CESSNA182	2072706
BOEING75	1380112	CESSNA150	2071804	CESSNA182	2072708
BOEING75	1380114	CESSNA150	2071806	CESSNA182	2072710
BOEING75	1380116	CESSNA150	2071808	CESSNA182	2072712
BOEING75	1380118	CESSNA150	2071810	CESSNA182	2072714
BOEING75	1380120	CESSNA150	2071812	CESSNA182	2072716
BOEING75	1380121	CESSNA150	2071814	CESSNA182	2072718
BOEING75	1380122	CESSNA150	2071816	CESSNA182	2072722
BOEING75	1380124	CESSNA150	2071818	CESSNA182	2072724
BOEING75	1380126	CESSNA150	2071820	CESSNA182	2072726
BOEING75	1380130	CESSNA150	2071822	CESSNA182	2072728
BOEING75	1380131	CESSNA150	2071824	CESSNA182	2072730
BOEING75	1380132	CESSNA150	2071826	CESSNA182	2072731
BOEING75	1380134	CESSNA150	2071828	CESSNA182	2072732
BOEING75	1380136	CESSNA150	2071830	CESSNA182	2072734
BOEING75	1380137	CESSNA150	2071831	CESSNA182	2072735
BOEING75	1380138	CESSNA150	2071835	CESSNA182	2072736
BOEING75	1380140	CESSNA150	2071836	CESSNA182	2075802
BOEING75	1380142	CESSNA170	2072302	CESSNA182	2075806
BOEING75	1380144	CESSNA170	2072304	CESSNA182	2075814
BOEING75	1380146	CESSNA170	2072306	CESSNA182	2075816
BOEING75	1380148	CESSNA172	2072202	CESSNA185	*185
BOEING75	1380150	CESSNA172	2072402	CESSNA185	2072802
BOEING75	1380152	CESSNA172	2072404	CESSNA185	2072804
BOEING75	1380154	CESSNA172	2072406	CESSNA185	2072806
BOEING767	1385102	CESSNA172	2072408	CESSNA185	2072808
BOEING767	1385120	CESSNA172	2072410	CESSNA185	2072812
BOEING767	1385122	CESSNA172	2072412	CESSNA185	2072816
BOEING767	1385123	CESSNA172	2072413	CESSNA185	2072818
BOEING767	1385131	CESSNA172	2072414	CESSNA185	2072820
BOEING767	1385132	CESSNA172	2072416	CESSNA185	2072821
BOLKMS105	1406006	CESSNA172	2072418	CESSNA188	2073002
BOLKMS105	5626005	CESSNA172	2072420	CESSNA188	2073004
BOLKMS105	5626006	CESSNA172	2072421	CESSNA188	2073005
BRAERODH125	1500205	CESSNA172	2072424	CESSNA188	2073006
BRAERODH125	4230170	CESSNA172	2072425	CESSNA188	2073007
BRASOVIS28	4490102	CESSNA172	2072426	CESSNA188	2073008
BRWSTRFLEET2	1461202	CESSNA172	2072428	CESSNA188	2073010
BRWSTRFLEET2	1461204	CESSNA172	2072429	CESSNA188	2073011
BRWSTRFLEET7	1461502	CESSNA172	2072430	CESSNA188	2073012
BRWSTRFLEET7	1461504	CESSNA172	2072431	CESSNA190	2072902
BRWSTRFLEET7	1461506	CESSNA172	2072432	CESSNA195	2073102
BRWSTRFLEET7	1461512	CESSNA172	2072434	CESSNA195	2073104
BRWSTRFLEET7	1461514	CESSNA172	2072436	CESSNA195	2073106
BRWSTRFLEET7	1461516	CESSNA172	2072437	CESSNA195	2073108
BUKER 131	1590104	CESSNA172	2072438	CESSNA195	2073110
BUKER 131	1590114	CESSNA172	2072443	CESSNA195	2073112
CAMRONMODELO	1880104	CESSNA175	2072502	CESSNA205	2073202
CAMRONMODELO	1880106	CESSNA175	2072504	CESSNA205	2073204
CAMRONMODELO	1880108	CESSNA175	2072506	CESSNA206	*206
CAMRONMODELO	1880110	CESSNA175	2072508	CESSNA206	2073302
CAMRONMODELO	1880112	CESSNA177	2073704	CESSNA206	2073304
CAMRONMODELO	1880113	CESSNA177	2073706	CESSNA206	2073306
CAMRONMODELO	1880120	CESSNA177	2073708	CESSNA206	2073308
CAMRONMODELO	1880122	CESSNA177	2073709	CESSNA206	2073309
CAMRONMODELO	1880201	CESSNA180	2072602	CESSNA206	2073310
CAMRONMODELO	1880202	CESSNA180	2072604	CESSNA206	2073311
CAMRONMODELO	1880203	CESSNA180	2072606	CESSNA206	2073312
CAMRONMODELO	1880204	CESSNA180	2072608	CESSNA206	2073313
CASA C212	2410200	CESSNA180	2072610	CESSNA206	2073316
CASA C212	2410204	CESSNA180	2072612	CESSNA206	2073318
CASA C212	2410302	CESSNA180	2072614	CESSNA206	2073322

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
CESSNA208	2073324	CESSNA310	2074214	CESSNA421	2078014
CESSNA208	2073332	CESSNA310	2074216	CESSNA421	2078016
CESSNA208	2073333	CESSNA310	2074218	CESSNA425	2078018
CESSNA208	2073334	CESSNA310	2074220	CESSNA441	2078020
CESSNA208	2073338	CESSNA310	2074222	CESSNA500	2078602
CESSNA208	2073340	CESSNA310	2074224	CESSNA500	2078604
CESSNA208	2073342	CESSNA310	2074226	CESSNA501	2088803
CESSNA208	2073344	CESSNA310	2074228	CESSNA501	2078605
CESSNA208	2073346	CESSNA310	2074230	CESSNAT50	2071302
CESSNA208	2073348	CESSNA310	2074234	CESSNAT50	2071304
CESSNA208	2073350	CESSNA310	2074236	CESSNAT50	2071306
CESSNA208	2073352	CESSNA310	2074238	CESSNAT50	2071308
CESSNA208	2073353	CESSNA310	2074240	CESSNAUC94	2070902
CESSNA208	2073356	CESSNA310	2074242	CESSNAUC94	2071002
CESSNA208	2073357	CESSNA310	2074244	CESSNAUC94	2071102
CESSNA207	*207	CESSNA310	2074245	CESSNAUC94	2071104
CESSNA207	2073602	CESSNA310	2074246	CHILD S1	0110100
CESSNA207	2073604	CESSNA320	2074502	CHILD S1	0110301
CESSNA207	2073612	CESSNA320	2074504	CHILD S1	0110303
CESSNA207	2073614	CESSNA320	2074506	CHILD S2	0110201
CESSNA210	2073402	CESSNA320	2074508	CHILD S2	0110202
CESSNA210	2073404	CESSNA320	2074510	CHILD S2	0110304
CESSNA210	2073406	CESSNA320	2074512	CHILD S2	011101A
CESSNA210	2073408	CESSNA320	2074514	CND AIRCL600	1900302
CESSNA210	2073410	CESSNA320	2074516	COMWTH185	2370602
CESSNA210	2073412	CESSNA335	2075601	COMWTH185	2370604
CESSNA210	2073414	CESSNA336	2075602	COMWTH185	2370808
CESSNA210	2073416	CESSNA337	*337	CONAERLA4	2400102
CESSNA210	2073418	CESSNA337	2075702	CONAERLA4	2400108
CESSNA210	2073422	CESSNA337	2075703	CONAERLA4	2400110
CESSNA210	2073430	CESSNA337	2075704	CONAERLA4	5110302
CESSNA210	2073432	CESSNA337	2075706	CONAERLA4	5110304
CESSNA210	2073436	CESSNA337	2075707	CONAERLA4	5110306
CESSNA210	2073438	CESSNA337	2075712	CONAERLA4	5110310
CESSNA210	2073439	CESSNA337	2075714	CONAERLA4	5110312
CESSNA210	2073440	CESSNA337	2075717	CONAERLA4	5110314
CESSNA210	2073446	CESSNA337	2075719	CONAERLA4	5110316
CESSNA210	2073447	CESSNA337	2075721	CONAERLA4	5110320
CESSNA210	2073448	CESSNA337	2075723	CURTISC46	*C46
CESSNA210	2073449	CESSNA337	2075724	CURTISC46	2622601
CESSNA210	2073450	CESSNA337	2075725	CURTISC46	2622602
CESSNA210	2073451	CESSNA337	2075726	CURTISC46	2622604
CESSNA210	2073453	CESSNA337	2075727	CURTISC46	2622606
CESSNA210	2073454	CESSNA337	2075730	CURTISC46	2622608
CESSNA210	2073456	CESSNA337	2075731	CURTISC46	2622610
CESSNA303	2073820	CESSNA337	2075732	CURTISC46	2622624
CESSNA305	2073902	CESSNA337	2075733	CURTISC46	2622701
CESSNA305	2074001	CESSNA340	2078404	CURTISC46	2622702
CESSNA305	2074002	CESSNA340	2078405	CURTISC46	2622704
CESSNA305	2074003	CESSNA401	*401	CURTISC46	2622706
CESSNA305	2074004	CESSNA401	207590C	CURTISC46	2622708
CESSNA305	2074005	CESSNA401	207590D	CURTISC46	2622710
CESSNA305	2074006	CESSNA401	207590E	CURTISC46	2622750
CESSNA305	2074008	CESSNA402	*402	CURTISJR	2620502
CESSNA305	2074010	CESSNA402	207590K	CURTISROBIN	2620802
CESSNA305	2074012	CESSNA402	207590L	CURTISROBIN	2620804
CESSNA305	2074014	CESSNA402	207590M	CURTISROBIN	2620806
CESSNA305	2074016	CESSNA402	207590P	CURTISROBIN	2620808
CESSNA305	2074018	CESSNA402	207590R	CURTISROBIN	2620810
CESSNA305	2074028	CESSNA404	2075901	CURTISROBIN	2620812
CESSNA305	2074030	CESSNA411	2075902	CURTISROBIN	2620814
CESSNA310	*310	CESSNA411	2075904	CURTISTRVAIR	2621004
CESSNA310	2074202	CESSNA414	*414	CURTISTRVAIR	2621006
CESSNA310	2074204	CESSNA414	2075907	CURTISTRVAIR	2621010
CESSNA310	2074206	CESSNA414	2075908	CURTISTRVAIR	2621012
CESSNA310	2074208	CESSNA421	*421	CURTISTRVAIR	2621104
CESSNA310	2074210	CESSNA421	2078010	CURTISTRVAIR	2621108
CESSNA310	2074212	CESSNA421	2078012	CURTISTRVAIR	2621202

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA	
CURTISTRVAIR	2621204	CVAC	240	2422647	DOUG DC10	3023001
CURTISTRVAIR	2621302	CVAC	240	242264A	DOUG DC10	3023501
CURTISTRVAIR	2621304	CVAC	340	*340	DOUG DC10	3023503
CURTISTRVAIR	2621306	CVAC	340	2422702	DOUG DC10	3023508
CURTISTRVAIR	2621308	CVAC	340	2422704	DOUG DC3	*DC3
CURTISTRVAIR	2621402	CVAC	340	2422708	DOUG DC3	3021401
CURTISTRVAIR	2621404	CVAC	340	2422708	DOUG DC3	3021402
CURTISTRVAIR	2621406	CVAC	340	242270A	DOUG DC3	3021404
CURTISTRVAIR	2621408	CVAC	340	242270H	DOUG DC3	3021406
CURTISTRVAIR	2621502	CVAC	340	2422712	DOUG DC3	3021410
CURTISTRVAIR	2621504	CVAC	340	2422714	DOUG DC3	3021412
CURTISTRVAIR	2621506	CVAC	340	2422716	DOUG DC3	3021414
CURTISTRVAIR	2621508	CVAC	340	2422718	DOUG DC3	3021416
CURTISTRVAIR	2621602	CVAC	340	2422742	DOUG DC3	3021418
CURTISTRVAIR	2621604	CVAC	BT13	2420202	DOUG DC3	3021420
CURTISTRVAIR	2621606	CVAC	BT13	2420204	DOUG DC3	3021422
CURTISTRVAIR	2621608	CVAC	BT13	2420206	DOUG DC3	3021424
CURTISTRVAIR	2621702	CVAC	BT13	2420208	DOUG DC3	3021425
CURTISTRVAIR	2621704	CVAC	BT13	2420210	DOUG DC3	3021426
CURTISTRVAIR	2621802	CVAC	BT13	2420222	DOUG DC3	3021427
CURTISTRVAIR	2621804	CVAC	BT13	2420224	DOUG DC3	3021428
CURTISTRVAIR	2621806	CVAC	BT13	2420226	DOUG DC3	3021429
CURTISTRVAIR	2621808	CVAC	BT13	2420228	DOUG DC3	3021430
CURTISTRVAIR	2621810	CVAC	BT13	2420230	DOUG DC3	3021431
CURTISTRVAIR	2621812	CVAC	L13	2420702	DOUG DC3	3021432
CURTISTRVAIR	2621814	CVAC	L13	2420704	DOUG DC3	3021433
CURTISTRVAIR	2621816	CVAC	L13	2420706	DOUG DC3	3021434
CURTISTRVAIR	2621818	CVAC	STC580	*STC580	DOUG DC3	3021436
CURTISTRVAIR	2621820	CVAC	STC580	2422801	DOUG DC3	3021438
CURTISTRVAIR	2621822	CVAC	STC580	2422802	DOUG DC3	3021440
CURTISTRVAIR	2621824	CVAC	STC580	2422804	DOUG DC3	3021441
CURTISTRVAIR	2621826	CVAC	STC580	2422806	DOUG DC3	3021442
CURTISTRVAIR	2621828	CVAC	STC580	2423001	DOUG DC3	3021443
CURTISTRVAIR	2621830	CVAC	STC580	2423002	DOUG DC3	3021444
CURTISTRVAIR	2621832	DART	G	2700102	DOUG DC3	3021445
CURTISTRVAIR	2621902	DART	G	2700104	DOUG DC3	3021446
CURTISTRVAIR	2621904	DART	G	2700106	DOUG DC3	3021447
CURTISTRVAIR	2621906	DART	G	2700108	DOUG DC3	3021448
CURTISTRVAIR	2621908	DHAV	DHC1	2801702	DOUG DC3	3021449
CVAC	22	DHAV	DHC1	2801704	DOUG DC3	3021450
CVAC	22	DHAV	DHC1	2801712	DOUG DC3	3021451
CVAC	22	DHAV	DHC1	2801714	DOUG DC3	3021452
CVAC	22	DHAV	DHC1	2801716	DOUG DC3	3021453
CVAC	240	DHAV	DHC1	2801736	DOUG DC3	3021454
CVAC	240	DHAV	DHC1	2801738	DOUG DC3	3021455
CVAC	240	DHAV	DHC1	2801739	DOUG DC3	3021456
CVAC	240	DHAV	DHC2	*DHC2	DOUG DC3	3021457
CVAC	240	DHAV	DHC2	2800102	DOUG DC3	3021458
CVAC	240	DHAV	DHC2	2800103	DOUG DC3	3021460
CVAC	240	DHAV	DHC2	2800104	DOUG DC3	3021461
CVAC	240	DHAV	DHC2	2800105	DOUG DC3	3021462
CVAC	240	DHAV	DHC2	2800106	DOUG DC3	3021463
CVAC	240	DHAV	DHC2	2800107	DOUG DC3	3021464
CVAC	240	DHAV	DHC2	2800108	DOUG DC3	3021466
CVAC	240	DHAV	DHC2	2800109	DOUG DC3	3021467
CVAC	240	DHAV	DHC2	2801830	DOUG DC3	3021468
CVAC	240	DHAV	DHC2	2801832	DOUG DC3	3021470
CVAC	240	DHAV	DHC3	*DHC3	DOUG DC3	3021471
CVAC	240	DHAV	DHC3	2800202	DOUG DC3	3021472
CVAC	240	DHAV	DHC6	*DHC6	DOUG DC3	3021474
CVAC	240	DHAV	DHC6	2802606	DOUG DC3	3021476
CVAC	240	DHAVXXDH82	2801002	DOUG DC3	3021478	
CVAC	240	DOUG	A26	3020504	DOUG DC3	3021481
CVAC	240	DOUG	A26	3020506	DOUG DC4	*DC4
CVAC	240	DOUG	DC10	*DC10	DOUG DC4	3021502
CVAC	240	DOUG	DC10	3022110	DOUG DC4	3021504
CVAC	240	DOUG	DC10	3022111	DOUG DC4	3021506
CVAC	240	DOUG	DC10	3022114	DOUG DC4	3021508
CVAC	240	DOUG	DC10	3022118	DOUG DC4	3021510

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
DOUG DC4	3021512	DOUG DC9	*DC9	FRCHLD24	3370214
DOUG DC4	3021514	DOUG DC9	3022002	FRCHLD24	3370216
DOUG DC4	3021516	DOUG DC9	3022026	FRCHLD24	3370218
DOUG DC4	3021518	DOUG DC9	3022028	FRCHLD24	3370220
DOUG DC4	3021520	DOUG DC9	3022028	FRCHLD24	3370222
DOUG DC4	3021522	DOUG DC9	3022030	FRCHLD24	3370224
DOUG DC4	3021524	DOUG DC9	3022034	FRCHLD24	3370302
DOUG DC4	3021526	DOUG DC9	3022036	FRCHLD24	3370304
DOUG DC4	3021528	DOUG DC9	3022037	FRCHLD24	3370402
DOUG DC4	3021530	DOUG DC9	302203D	FRCHLD24	3370404
DOUG DC4	3021532	DOUG DC9	302203F	FRCHLD24	3370406
DOUG DC4	3021534	DOUG DC9	302203H	FRCHLD24	3370408
DOUG DC4	3021536	DOUG DC9	302203K	FRCHLD24	3370410
DOUG DC4	3021537	DOUG DC9	3022051	FRCHLD24	3370412
DOUG DC4	3021538	DOUG DC9	302205A	FRCHLD24	3370414
DOUG DC6	*DC6	DOUG DC9	302205C	FRCHLD24	3370416
DOUG DC6	3021702	DOUG DC9	3022065	FRCHLD24	3370418
DOUG DC6	3021706	DOUG DC9	3022066	FRCHLD24	3370502
DOUG DC6	3021708	DOUG DC9	3022067	FRCHLD24	3370504
DOUG DC6	3021710	DOUG DC9	302206A	FRCHLD24	3370506
DOUG DC6	3021712	DOUG DC9	302206C	FRCHLD24	3370508
DOUG DC6	3021714	DOUG DC9	302206E	FRCHLD24	3370510
DOUG DC7	*DC7	DOUG DC9	302207A	FRCHLD24	3370512
DOUG DC7	3021802	DOUG DC9	302207C	FRCHLD24	3370514
DOUG DC7	3021804	DOUG DC9	302207D	FRCHLD24	3370516
DOUG DC7	3021806	DOUG DC9	302207N	FRCHLD24	3370518
DOUG DC8	*DC8	DOUG DC9	302207P	FRCHLD24	3370520
DOUG DC8	3021902	DOUG DC9	3022080	FRCHLD24	3370602
DOUG DC8	3021904	DOUG DC9	3022081	FRCHLD24	3370604
DOUG DC8	3021906	DOUG DC9	3022082	FRCHLD24	3370606
DOUG DC8	3021908	EAGLE DW	3230203	FRCHLD24	3370608
DOUG DC8	3021908	EAGLEBC7	3240207	FRCHLD24	3370610
DOUG DC8	302190D	EIRVON20	5760102	FRCHLD24	3370612
DOUG DC8	302190F	EIRVON20	5760104	FRCHLD24	3370614
DOUG DC8	302190H	EIRVON20	5760202	FRCHLD24	3370616
DOUG DC8	3021910	EIRVON20	5760204	FRCHLD24	3370618
DOUG DC8	3021912	EIRVON20	5760206	FRCHLD24	3370620
DOUG DC8	3021914	EIRVON20	5760207	FRCHLD24	3370622
DOUG DC8	3021916	EMAIR MA1	3280103	FRCHLD24	3370624
DOUG DC8	3021918	EMAIR MA1	6070102	FRCHLD24	3370626
DOUG DC8	3021918	EMB 110	*110	FRCHLD24	3370628
DOUG DC8	302191D	EMB 110	3260122	FRCHLD24	3370202
DOUG DC8	302191F	EMB 110	3260124	FRCHLD24	3370204
DOUG DC8	302191H	ENSTRMF28	3300404	FRCHLD24	3370206
DOUG DC8	302191K	ENSTRMF28	3300405	FRCHLD24	3370208
DOUG DC8	3021920	ENSTRMF28	3300406	FRCHLD24	3370210
DOUG DC8	3021922	ENSTRMF28	3300407	FRCHLD24	3370212
DOUG DC8	3021924	ENSTRMF28	3300412	FRCHLD24	3370214
DOUG DC8	3021926	ENSTRMF28	3300424	FRCHLD24	3370216
DOUG DC8	3021927	ENSTRMF28	3300502	FRCHLD24	3370218
DOUG DC8	3021928	ENSTRMF28	3300505	FRCHLD24	3370220
DOUG DC8	3021928	ENSTRMF28	3300550	FRCHLD24	3370222
DOUG DC8	302192D	ENSTRMF28	3300404	FRCHLD24	3370224
DOUG DC8	302192F	ENSTRMF28	3300405	FRCHLD24	3370302
DOUG DC8	302192H	ENSTRMF28	3300406	FRCHLD24	3370304
DOUG DC8	302192K	ENSTRMF28	3300407	FRCHLD24	3370402
DOUG DC8	302192M	ENSTRMF28	3300412	FRCHLD24	3370404
DOUG DC8	3021952	ENSTRMF28	3300424	FRCHLD24	3370406
DOUG DC8	3021953	ENSTRMF28	3300502	FRCHLD24	3370408
DOUG DC8	3021958	ENSTRMF28	3300505	FRCHLD24	3370410
DOUG DC8	302195D	ENSTRMF28	3300550	FRCHLD24	3370412
DOUG DC8	3021970	FLEET 16B	3480502	FRCHLD24	3370414
DOUG DC8	3021972	FLEET 16B	3480504	FRCHLD24	3370416
DOUG DC8	302197B	FRCHLD24	3370202	FRCHLD24	3370418
DOUG DC8	302197D	FRCHLD24	3370204	FRCHLD24	3370502
DOUG DC8	302198A	FRCHLD24	3370206	FRCHLD24	3370504
DOUG DC8	302198B	FRCHLD24	3370208	FRCHLD24	3370506
DOUG DC8	302198F	FRCHLD24	3370210	FRCHLD24	3370508
DOUG DC8	302198H	FRCHLD24	3370212	FRCHLD24	3370510

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
FRCHLD24	3370512	GRUMAVAA1	0631202	GULSTM690TP	7630518
FRCHLD24	3370514	GRUMAVAA1	0632001	GULSTM690TP	7630519
FRCHLD24	3370516	GRUMAVAA1	3960100	GULSTM690TP	3970405
FRCHLD24	3370518	GRUMAVAA1	3960101	GULSTMAA1	0630610
FRCHLD24	3370520	GRUMAVAA1	3960102	GULSTMAA1	0630710
FRCHLD24	3370602	GRUMAVAA1	3960103	GULSTMAA1	0631206
FRCHLD24	3370604	GRUMAVAA1	3960502	GULSTMAA1	0631214
FRCHLD24	3370606	GRUMAVAA5	0632005	GULSTMAA5	0631410
FRCHLD24	3370608	GRUMAVAA5	3960104	GULSTMAA5	3960105
FRCHLD24	3370610	GRUMAVG1159	3960302	GULSTMAA5	3960106
FRCHLD24	3370612	GRUMAVG164	3952801	GULSTMAA5	3960107
FRCHLD24	3370614	GRUMAVG164	3960201	GULSTMAA5	3960124
FRCHLD24	3370616	GRUMAVG164	3960202	GULSTMG1159	*G1159
FRCHLD24	3370618	GRUMAVG164	3960203	GULSTMG1159	3953505
FRCHLD24	3370620	GRUMAVG164	3960204	GULSTMG1159	3953535
FRCHLD24	3370622	GRUMAVG164	3979904	GULSTMG1159	3970109
FRCHLD24	3370624	GRUMAVG164	8052214	GULSTMG159	3952202
FRCHLD24	3370626	GRUMAVG21	3951202	GULSTMG44	*G44
FRCHLD24	3370628	GRUMAVG21	3951204	GULSTMG44	3951502
FRCHLDC119	3372102	GRUMAVG21	3951206	GULSTMG44	3951504
FRCHLDC119	3372106	GRUMAVG21	3951208	GULSTMG44	3951506
FRCHLDC119	3372108	GRUMAVG21	3951210	GULSTMG44	3951508
FRCHLDF27	*F27	GRUMAVG21	3951212	GULSTMG73	*G73
FRCHLDF27	3373002	GRUMAVG21	3951214	GULSTMG73	3951802
FRCHLDF27	3373004	GRUMAVG21	3951216	GULSTMGA7	3960401
FRCHLDF27	3373006	GRUMAVG21	3951218	HELIO H295	4300802
FRCHLDF27	3373008	GRUMAVTBM	3950306	HELIO H295	4300803
FRCHLDF27	3373010	GRUMAVTBM	3950308	HELIO H295	4301101
FRCHLDF27	3373016	GRUMAVTBM	3950310	HELIO H295	4301102
FRCHLDM62	3371604	GULSTM112	0144701	HELIO H295	4301104
FRCHLDM62	3371606	GULSTM112	7630302	HELIO H391	4300102
FRCHLDM62	3371608	GULSTM112	7630303	HELIO H391	4300104
FRCHLDM62	3371609	GULSTM112	7630306	HELIO H391	4300106
FRCHLDM62	3371610	GULSTM112	7630307	HELIO H395	4300202
FRCHLDM62	3371612	GULSTM112	7630314	HELIO H395	4300204
FRCHLDM62	3371614	GULSTM112	7630315	HELIO H395	4300206
FRCHLDM62	3371616	GULSTM112	7630316	HILLERFH1100	3376502
FRCHLDM62	3371618	GULSTM500	0141102	HILLERFH1100	4361405
FRCHLDM62	3371620	GULSTM500	0141104	HILLERUH12	4360102
FRCHLDM62	3371622	GULSTM500	0141106	HILLERUH12	4360103
FRCHLDM62	3371624	GULSTM500	0141107	HILLERUH12	4360104
FRCHLDM62	3371626	GULSTM500	0141108	HILLERUH12	4360105
FRCHLDM62	3371628	GULSTM520	0141202	HILLERUH12	4360106
FRCHLDM62	3371630	GULSTM560	0141402	HILLERUH12	4360107
FRCHLDM62	3371632	GULSTM560	0141404	HILLERUH12	4360108
FRCHLDM62	3371634	GULSTM560	0141406	HILLERUH12	4360110
FRCHLDM62	3371636	GULSTM680	*680	HILLERUH12	4360112
FRCHLDM62	3371638	GULSTM680	0141408	HILLERUH12	4360113
FRCHLDM62	3371640	GULSTM680	0141602	HILLERUH12	4360114
FRCHLDM62	3371642	GULSTM680	0141604	HILLERUH12	4360115
FRCHLDM62	3374004	GULSTM680	0141606	HILLERUH12	4360116
FRCHLDM62	3374006	GULSTM680	0141608	HILLERUH12	4360117
GENBALAX8	3760102	GULSTM680	0141610	HILLERUH12	4360118
GENBALAX8	3760202	GULSTM680	0141611	HILLERUH12	4360119
GLASFL201	3800344	GULSTM680	0141612	HILLERUH12	4360120
GLASFLH301	3800335	GULSTM680	0141802	HILLERUH12	4360121
GLASFLH301	3800337	GULSTM680	7630513	HILLERUH12	4360122
GLASFLH301	3800339	GULSTM680TP	0141712	HILLERUH12	4360124
GLASFLH301	3800341	GULSTM680TP	0141714	HILLERUH12	4360125
GROB 103CAT	1660202	GULSTM680TP	0141716	HILLERUH12	4360128
GROB 109	1660204	GULSTM680TP	0141718	HILLERUH12	4360128
GROB ASTIR	1660104	GULSTM690TC	3970404	HILLERUH12	4360129
GRTLKS2T1	3910101	GULSTM690TP	0141720	HILLERUH12	4360130
GRTLKS2T1	3910102	GULSTM690TP	0141722	HILLERUH12	4360135
GRTLKS2T1	3910104	GULSTM690TP	3970410	HILLERUH12	4360809
GRTLKS2T1	3910106	GULSTM690TP	3970411	HUGHES269	4470402
GRTLKS2T1	3910108	GULSTM690TP	7630515	HUGHES269	4470403
GRTLKS2T1	3910107	GULSTM690TP	7630516	HUGHES269	4470404
GRUMAVAA1	0630820	GULSTM690TP	7630517	HUGHES269	4470406

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
HUGHES289	4470502	LEAR 24	*24	LUSCOM8	8190122
HUGHES289	4470504	LEAR 24	5170302	LUSCOM8	8190124
HUGHES289	4471004	LEAR 24	5170304	LUSCOM8	8190128
HUGHES389	4470702	LEAR 24	5170306	LUSCOM8	8190128
HUGHES389	4470704	LEAR 24	5170307	LUSCOM8	8190130
HUGHES389	4470706	LEAR 24	5170309	LUSCOM8	8190132
HUGHES389	4470718	LEAR 24	5170310	LUSCOM8	8190154
HUGHES369	4470720	LEAR 24	5170311	LUSCOM8	819019E
HUGHES369	4470722	LEAR 25	*25	MARTIN404	*404
HUGHES369	4470728	LEAR 25	5170506	MARTIN404	5450702
HUGHES369	4470730	LEAR 25	5170509	MAULE M4	5460102
HUGHES369	4470802	LEAR 25	5170511	MAULE M4	5460104
HUGHES369	4470806	LEAR 25	5170513	MAULE M4	5460105
HWKSLYDH104	*DH104	LEAR 25	5170514	MAULE M4	5460106
HWKSLYDH104	2800402	LEAR 35	*35	MAULE M4	5460108
HWKSLYDH104	2800404	LEAR 35	5170600	MAULE M4	5460112
HWKSLYDH104	2800406	LEAR 35	5170601	MAULE M4	5460114
HWKSLYDH104	2800408	LEAR 35	5170602	MAULE M4	5460116
HWKSLYDH104	2800410	LEAR 55	5170702	MAULE M4	5460128
HWKSLYDH104	2800412	LET L13	1360306	MAULE M4	5460130
HWKSLYDH104	2800414	LKHEED1011	*1011	MAULE M4	5460132
HWKSLYDH104	2800416	LKHEED1011	5265010	MAULE M5	5460133
HWKSLYDH104	2800417	LKHEED1011	5265015	MAULE M5	5460134
HWKSLYDH104	2800418	LKHEED1011	5265020	MAULE M5	5460135
HWKSLYDH104	2800420	LKHEED12A	5261402	MAULE M5	5460204
HWKSLYDH125	*DH125	LKHEED12A	5261404	MAULE M6	5460180
HWKSLYDH125	1500204	LKHEED12A	5261406	MCLISHFUNKB	5480102
HWKSLYDH125	4210101	LKHEED12A	5261408	MCLISHFUNKB	5480104
HWKSLYDH125	4210112	LKHEED12A	5261410	MCLISHFUNKB	5480106
HWKSLYDH125	4230106	LKHEED1329	*1329	MCLISHFUNKB	5480108
HWKSLYDH125	4230110	LKHEED1329	5263102	MCLISHFUNKB	5480202
HWKSLYDH125	4230126	LKHEED1329	5263108	MCLISHFUNKB	5480204
HWKSLYDH125	4230138	LKHEED1329	5263116	MCLISHFUNKB	5480206
HWKSLYDH125	423013M	LKHEED1329	5263125	MCLISHFUNKB	5480208
HWKSLYDH125	423013P	LKHEED18	5261802	MEYERSOTW	5650202
HWKSLYDH125	4230140	LKHEED18	5261803	MEYERSOTW	5650204
HWKSLYDH125	4230158	LKHEED18	5261804	MEYERSOTW	5650206
HWKSLYDH125	4230160	LKHEED18	5261806	MEYERSOTW	5650208
HYNES B2	1440502	LKHEED18	5261808	MNC0UP90	5810102
HYNES B2	1440504	LKHEED18	5261810	MNC0UP90	5810104
HYNES B2	1440506	LKHEED18	5261812	MNC0UP90	5810107
HYNES B2	1440508	LKHEED18	5261814	MNC0UP90	5810108
INTRCP200	5650302	LKHEED18	5261816	MNC0UP90	5810110
INTRCP200	5650304	LKHEED18	5261818	MNMITEM18	5870102
INTRCP200	5650306	LKHEED18	5261820	MNMITEM18	5870104
INTRCP200	5650308	LKHEED18	5261822	MNMITEM18	5870106
INTRCP200	5650310	LKHEED18	5261824	MNMITEM18	5870108
ISRAEL 1121	0142002	LKHEED18	5261832	MOONEYM20	5870202
ISRAEL 1121	0142006	LKHEED18	5261834	MOONEYM20	5870204
ISRAEL 1121	0142010	LKHEED18	5261836	MOONEYM20	5870206
ISRAEL 1123	*1123	LKHEED18	5261838	MOONEYM20	5870208
ISRAEL 1123	4500101	LKHEED18	5261840	MOONEYM20	5870210
ISRAEL 1124	*1124	LKHEED18	5261842	MOONEYM20	5870212
ISRAEL 1124	4500102	LKHEEDPV1	5260102	MOONEYM20	5870214
ISRAEL 1124	4500103	LKHEEDPV1	5260106	MOONEYM20	5870219
JBMSTRDGA15	4690502	LKHEEDT33	5260401	MOONEYM20	5870220
JBMSTRDGA15	4690504	LKHEEDT33	5260402	MOONEYM20	5870302
JBMSTRDGA15	4690506	LKHEEDT33	5260404	MOONEYM20	5870304
JBMSTRDGA15	4690508	LKHEEDT33	5260406	MOONEYM20	5870306
JBMSTRDGA15	4690510	LUSCOM8	8190102	MOONEYM20	5870308
JBMSTRDGA15	4690512	LUSCOM8	8190104	MOONEYM20	5870310
JBMSTRDGA15	4690514	LUSCOM8	8190106	MOONEYM20	5870312
JBMSTRDGA15	4690516	LUSCOM8	8190108	MOONEYM20	5870314
JBMSTRDGA15	4690518	LUSCOM8	8190110	MOONEYM20	5870316
LAIKFN10	5090204	LUSCOM8	8190112	MOONEYM20	5870601
LAIKFN10	5090206	LUSCOM8	8190114	MOONEYM20	5870605
LAIKFN10	5090208	LUSCOM8	8190116	MRCHTIS205	8120412
LEAR 23	*23	LUSCOM8	8190118	MTSBSIMU2	5780404
LEAR 23	5170102	LUSCOM8	8190120	MTSBSIMU2	5780405

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
MTSBSIMJ2	5780408	NAVIONNAVION	8150110	PIPER J3	7100522
MTSBSIMJ2	5780407	NAVIONNAVION	8150118	PIPER J3	7100524
MTSBSIMJ2	5780408	NAVIONNAVION	8150132	PIPER J3	7100528
MTSBSIMJ2	5780409	NAVIONNAVION	8150134	PIPER J3	7100528
MTSBSIMJ2	5780410	NAVIONNAVION	8150138	PIPER J3	710052T
MTSBSIMJ2	5780411	NAVIONNAVION	8150138	PIPER J3	7100530
MTSBSIMJ2	5780412	NAVIONNAVION	8150140	PIPER J3	7100532
MTSBSIMJ2	5780413	NAVIONNAVION	8150142	PIPER J3	7100534
MTSBSIMJ2	5780414	NAVIONNAVION	8150144	PIPER J3	7100536
MTSBSIMJ300	5780802	NAVIONNAVION	8150148	PIPER J3	7100538
MULTECD18	9230802	NAVIONNAVION	8150180	PIPER J3	7100540
MULTECD18	9230804	NAVIONNAVION	8150182	PIPER J3	7100542
MULTECD18	9230808	NAVIONNAVION	8150184	PIPER J3	7100544
MULTECD18	9230808	NAVIONNAVION	8150186	PIPER J3	7100548
MULTECD18	9230810	NAVIONNAVION	8150188	PIPER J3	7100548
MULTECD18	9230812	NAVIONNAVION	8150170	PIPER J3	7100550
NAMER B25	8400702	NAVIONNAVION	8150172	PIPER J3	7100552
NAMER B25	8400704	NAVIONNAVION	8150174	PIPER J3	7101102
NAMER B25	8400705	NAVIONNAVION	8150178	PIPER J3	7101104
NAMER B25	8400708	NAVIONNAVION	8150178	PIPER J4	7100802
NAMER B25	8400708	NORD SV4	8383008	PIPER J4	7100804
NAMER B25	8400710	NORD SV4	8470102	PIPER J4	7100805
NAMER B25	8400712	NORWST85	8480118	PIPER J4	7100808
NAMER B25	8400713	NORWST85	8480118	PIPER J4	7100808
NAMER B25	8400714	NORWST85	8480120	PIPER J4	7100810
NAMER B25	8400718	NORWST85	8480122	PIPER J4	7100812
NAMER B25	8400719	NORWST85	8480124	PIPER J4	7100814
NAMER F51	8402301	ORLHELH19	8141808	PIPER J5	7100202
NAMER F51	8402302	ORLHELH19	8141809	PIPER J5	7100204
NAMER F51	8402303	ORLHELH19	8141810	PIPER J5	7100702
NAMER F51	8402304	ORLHELH19	8141812	PIPER J5	7100704
NAMER F51	8402308	ORLHELH19	8141814	PIPER J5	7100708
NAMER F51	8402307	ORLHELH19	8141818	PIPER J5	7100708
NAMER F51	8402308	ORLHELH19	8141818	PIPER J5	7100710
NAMER F51	8402309	ORLHELH19	814181G	PIPER J5	7100712
NAMER F51	8402310	ORLHELH19	814181J	PIPER PA12	7101202
NAMER NA280	8402502	ORLHEL558	814181A	PIPER PA12	7101204
NAMER NA280	8402504	ORLHEL558	8141812	PIPER PA14	7101402
NAMER NA280	8402505	ORLHEL558	8141818	PIPER PA15	7101502
NAMER T8	1922828	PARTENP88	8780105	PIPER PA18	7101802
NAMER T8	8400402	PARTENP88	8780108	PIPER PA18	7101804
NAMER T8	8400404	PICARDAX8	7001218	PIPER PA17	7101702
NAMER T8	8400405	PILATSB4	7090103	PIPER PA18	7101802
NAMER T8	8400406	PILATSB4	7090104	PIPER PA18	7101804
NAMER T8	8400407	PIPER 800	*800	PIPER PA18	7101808
NAMER T8	8400408	PIPER 800	7108001	PIPER PA18	7101808
NAMER T8	8400410	PIPER 800	7108002	PIPER PA18	7101809
NAMER T8	8400412	PIPER 800	7108010	PIPER PA18	7101810
NAMER T8	8400414	PIPER 800	7108011	PIPER PA18	7101811
NAMER T8	8400415	PIPER 800	7108012	PIPER PA18	7101812
NAMER T8	8400418	PIPER 800	7108015	PIPER PA18	7101813
NAMER T8	8400417	PIPER 800	8380807	PIPER PA18	7101814
NAMER T8	8400418	PIPER 800	7108014	PIPER PA18	7101815
NAMER T8	8400419	PIPER E2	7100302	PIPER PA18	7101818
NAMER T8	8400420	PIPER J2	7100402	PIPER PA18	7101818
NAMER T8	8400422	PIPER J3	7100501	PIPER PA18	7101820
NAMER T8	8400423	PIPER J3	7100502	PIPER PA18	7101822
NAMER T8	8400424	PIPER J3	7100504	PIPER PA18	7101824
NAMER T8	8400428	PIPER J3	7100508	PIPER PA18	7101828
NAMER T8	8400430	PIPER J3	7100508	PIPER PA18	7101828
NAMER T8	8400431	PIPER J3	7100509	PIPER PA18	7101830
NAMER T8	8400432	PIPER J3	7100510	PIPER PA18	7101832
NAMER T8	8400434	PIPER J3	7100511	PIPER PA18	7101834
NAMER T8	8400438	PIPER J3	7100512	PIPER PA18	7101836
NAMER T8	8400441	PIPER J3	7100514	PIPER PA18	7101837
NAMER T8	8400442	PIPER J3	7100518	PIPER PA18	7101838
NAVAL N3N	8120202	PIPER J3	7100518	PIPER PA18	7101880
NAVIONNAVION	8150108	PIPER J3	7100519	PIPER PA18	7101902
NAVIONNAVION	8150108	PIPER J3	7100520	PIPER PA18	7101904

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
PIPER PA18	7101908	PIPER PA28	7102808	PROPJT200	0140314
PIPER PA20	7102002	PIPER PA28	7102809	RAVEN RX8	7480502
PIPER PA20	7102004	PIPER PA28	7102810	RAVEN S50	05804XW
PIPER PA20	7102008	PIPER PA28	7102811	RAVEN S50	7480204
PIPER PA20	7102008	PIPER PA28	7102812	RAVEN S55	7480402
PIPER PA20	7102010	PIPER PA28	7102813	RAVEN S60	7480608
PIPER PA20	7102012	PIPER PA28	7102814	RAVEN S60	7480610
PIPER PA22	7102202	PIPER PA28	7102815	RAVEN S68	7480812
PIPER PA22	7102204	PIPER PA28	7102816	RAVEN S68	7480815
PIPER PA22	7102206	PIPER PA28	7102817	RKWE1500	*500
PIPER PA22	7102208	PIPER PA28	7102818	RKWE1500	7830410
PIPER PA22	7102210	PIPER PA28	7102819	RKWE1700	7830520
PIPER PA22	7102212	PIPER PA28	7102830	RKWE1NA265	*NA265
PIPER PA22	7102214	PIPER PA30	*PA30	RKWE1NA265	6402802
PIPER PA22	7102216	PIPER PA30	7103002	RKWE1NA265	6402804
PIPER PA22	7102202	PIPER PA30	7103902	RKWE1NA265	6402808
PIPER PA22	7102204	PIPER PA30	7104002	RKWE1NA265	6402808
PIPER PA22	7102208	PIPER PA31	*PA31	RKWE1NA265	6402812
PIPER PA22	7102208	PIPER PA31	7103102	RKWE1NA265	6402814
PIPER PA22	7102210	PIPER PA31	7103104	RKWE1NA265	6402818
PIPER PA22	7102212	PIPER PA31	7103105	RKWE1NA265	7830101
PIPER PA22	7102214	PIPER PA31	7103110	RKWE1NA265	7830104
PIPER PA22	7102216	PIPER PA31	7103120	RKWE1NA265	7830108
PIPER PA23	*PA23	PIPER PA31	*PA31	RKWE1NA265	7830107
PIPER PA23	7102302	PIPER PA31	7103102	RKWE1NA265	7830108
PIPER PA23	7102303	PIPER PA31	7103104	ROBS1NR22	7840102
PIPER PA23	7102304	PIPER PA31	7103105	ROLSCHLS	3801208
PIPER PA23	7102305	PIPER PA31	7103110	ROLSCHLS	3801208
PIPER PA23	7102308	PIPER PA31	7103120	ROLSCHLS	3801211
PIPER PA23	7102308	PIPER PA31T	7103124	ROLSCHLS	3801214
PIPER PA23	7102309	PIPER PA31T	7103126	ROLSCHLS	3801250
PIPER PA23	7102310	PIPER PA31T	7103127	RYAN ST3	7830502
PIPER PA24	7102402	PIPER PA31T	7103128	RYAN ST3	7830504
PIPER PA24	7102403	PIPER PA32	7103116	RYAN ST3	7830508
PIPER PA24	7102404	PIPER PA32	7103206	RYAN STA	7830402
PIPER PA24	7102406	PIPER PA32	7103207	RYAN STA	7830404
PIPER PA24	7102408	PIPER PA32	7103209	SCHLERASW15	38015H2
PIPER PA24	7102409	PIPER PA32	7103210	SCHLERASW15	38015H2
PIPER PA25	7102502	PIPER PA32	7103211	SCHLERASW19	3801508
PIPER PA25	7102503	PIPER PA32	7103212	SCHLERASW19	3801505
PIPER PA25	7102504	PIPER PA32	7103213	SCHLERASW20	3801503
PIPER PA25	7102508	PIPER PA32	7103214	SCHLERASW20	3801506
PIPER PA28	7102510	PIPER PA32	7103215	SCHLERK8	3801559
PIPER PA28	7102802	PIPER PA32	7103218	SCHLERK8	3801583
PIPER PA28	7102803	PIPER PA32	7103220	SCHLERK8	3801587
PIPER PA28	7102804	PIPER PA32	7103222	SCHLERK8	38019VK
PIPER PA28	7102805	PIPER PA34	*PA34	SCHLERK8	38019VL
PIPER PA28	7102806	PIPER PA34	7103405	SCHLERKA8	3801525
PIPER PA28	7102807	PIPER PA34	7103406	SCHLERKA8	3801528
PIPER PA28	7102808	PIPER PA34	7103407	SCHLERKA8	3801530
PIPER PA28	7102809	PIPER PA34	7103420	SCHLERKA8	3801533
PIPER PA28	7102810	PIPER PA36	7103602	SCHLERKA8	3801535
PIPER PA28	7102811	PIPER PA36	7103610	SCHLERKA8	3801537
PIPER PA28	7102812	PIPER PA36	7103612	SCHLERKA8	3801540
PIPER PA28	7102813	PIPER PA36	7103614	SCHLERKA8	3801542
PIPER PA28	7102814	PIPER PA36	7103620	SCHLERKA8	3801545
PIPER PA28	7102815	PIPER PA38	7103812	SCHLERKA8	3801554
PIPER PA28	7102816	PIPER PA42	7104202	SCWZERG184	3952702
PIPER PA28	7102817	PIPER PA44	*PA44	SCWZERG184	3952704
PIPER PA28	7102818	PIPER PA44	7104402	SCWZERG184	3952802
PIPER PA28	7102819	PIPER PA44	7104404	SCWZERG184	3952803
PIPER PA26	7102830	PRATT PRG1	7300102	SCWZERSG1	8050102
PIPER PA28	7102510	PRATT PRG1	7300104	SCWZERSG1	8050104
PIPER PA28	7102802	PRATT PRG1	7300108	SCWZERSG1	8050106
PIPER PA28	7102803	PROPJT200	0140302	SCWZERSG1	8050108
PIPER PA28	7102804	PROPJT200	0140304	SCWZERSG1	8050110
PIPER PA28	7102805	PROPJT200	0140306	SCWZERSG1	8050112
PIPER PA28	7102806	PROPJT200	0140308	SCWZERSG1	8050114
PIPER PA28	7102807	PROPJT200	0140312	SCWZERSG1	8050118

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
SCWZERSG1	8050118	SPHRTHNIMBUS	3801923	SWRNGNSA26	8780112
SCWZERSG1	8050120	SPHRTHNIMBUS	3801925	TCRAFK21	8850906
SCWZERSG1	8050122	SPHRTHNIMBUS	3801950	TCRAFKD	8850402
SCWZERSG1	8050124	SPHRTHNIMBUS	38019VD	TCRAFKD	8850404
SCWZERSG1	8050148	SPHRTHNIMBUS	38019VF	TCRAFKD	8850406
SCWZERSG1	8050147	SPHRTHNIMBUS	38019VG	TCRAFKD	8850408
SCWZERSG1	8050148	SPHRTHNIMBUS	38019VJ	TCRAFKD	8850410
SCWZERSG1	8050149	SPHRTHVENTUS	3802050	TCRAFKD	8850412
SCWZERSG1	8050151	SPHRTHVENTUS	3802051	TCRAFKD	8850414
SCWZERSG1	8050153	STBROSSD3	*SD3	TCRAFKD	8850415
SCWZERSG1	8050502	STBROSSD3	8100602	TCRAFKD	8850416
SCWZERSG1	8050504	STNSON10	8632002	TCRAFKD	8850418
SCWZERSG2	8050202	STNSON10	8632004	TCRAFKD	8850420
SCWZERSG2	8050204	STNSON10	8632102	TCRAFKD	8850422
SCWZERSG2	8050206	STNSON10	8632104	TCRAFTA	8850202
SCWZERSG2	8050210	STNSON10	8632106	TCRAFTBC	8850302
SCWZERSG2	8050602	STNSONL5	8630202	TCRAFTBC	8850304
SCWZERSG2	8050604	STNSONL5	8630204	TCRAFTBC	8850306
SCWZERSG2	8050606	STNSONL5	8630206	TCRAFTBC	8850308
SCWZERSG2	8050608	STNSONL5	8630208	TCRAFTBC	8850310
SCWZERSG2	8050610	STNSONL5	8630210	TCRAFTBC	8850314
SCWZERSG2	8050612	STNSONL5	8630212	TCRAFTBC	8850316
SCWZERSG2	8050614	STNSONL5	8630214	TCRAFTBC	8850318
SCWZERSG2	8051404	STNSONSR9	8631502	TCRAFTBC	8850320
SCWZERSG2	8051604	STNSONSR9	8631504	TCRAFTBC	8850321
SCWZERSG2	8051806	STNSONSR9	8631506	TCRAFTBC	8850322
SEMCO CLNGER	8070802	STNSONSR9	8631508	TCRAFTBC	8850323
SEMCO MODEL T	8071701	STNSONSR9	8631510	TCRAFTBC	8850324
SKRSKYS55	8141802	STNSONSR9	8631512	TCRAFTBC	9230902
SKRSKYS55	8141804	STNSONSR9	8631514	TCRAFTBC	9230904
SKRSKYS55	8141806	STNSONSR9	8631516	TCRAFTBC	9230906
SKRSKYS58	8141801	STNSONSR9	8631518	TCRAFTBC	9230908
SKRSKYS58	8141802	STNSONSR9	8631520	TCRAFTBC	9230910
SKRSKYS58	8141804	STNSONSR9	8631522	TCRAFTBC	9230912
SKRSKYS58	8141806	STNSONSR9	8631524	TCRAFTBC	9230914
SKRSKYS58	8141808	STNSONSR9	8631526	TCRAFTBC	9230916
SKRSKYS58	8141809	STNSONSR9	8631528	TCRAFTBC	9230918
SKRSKYS58	8141814	STNSONV77	8631802	TCRAFTBC	9230920
SKRSKYS58	8141815	STNSONV77	8631804	TCRAFTBC	9230922
SKRSKYS58	8141816	STOLAMRC3	3080202	TCRAFTBC	9230924
SKRSKYS58	8141836	STOLAMRC3	3080204	TCRAFTBC	9230926
SKRSKYS76	8143006	STOLAMRC3	3080206	TCRAFTBC	9230928
SKRSKYS76	8143010	STOLAMRC3	5410102	TCRAFTBF	8850326
SLINDS100	0140202	SUPAC LA	8730202	TCRAFTBF	8850330
SLINDS100	0140204	SUPAC LA	8730204	TCRAFTBF	8850332
SLINDS100	0140208	SUPAC LA	8730206	TCRAFTBF	8850334
SLINDS100	9550102	SUPAC LA	8730208	TCRAFTBF	8850336
SLINDS100	9550104	SUPAC V	8730302	TCRAFTBF	8850338
SMITH 600	8360604	SUPAC V	8730304	TCRAFTBF	8850340
SMITH 600	8360605	SUPAC V	8730306	TCRAFTBF	8850344
SMITH 600	8360608	SUPAC V	8730308	TCRAFTBL	8850346
SMITH 600	1710602	SWRNGNSA226	*SA226	TCRAFTBL	8850348
SMITH 600	1710606	SWRNGNSA226	8780122	TCRAFTBL	8850350
SMITH 600	8360602	SWRNGNSA226	8780402	TCRAFTBL	8850354
SMITH 600	8360606	SWRNGNSA226	8780404	TCRAFTBL	8850356
SNIAS 350	8680801	SWRNGNSA226	8780405	TEMCO 11A	8890402
SNIAS 350	8680803	SWRNGNSA226	8780406	TEMCO 11A	8890404
SNIAS 350	8680804	SWRNGNSA226	*SA226	THUNDRAX7	8970105
SNIAS 350	8680802	SWRNGNSA226	8780122	THUNDRAX7	8970106
SNIAS SA318	8680506	SWRNGNSA226	8780402	THUNDRAX7	8970107
SNIAS SA318	8680508	SWRNGNSA226	8780404	THUNDRAX7	8970108
SNIAS SA318	8680511	SWRNGNSA226	8780405	THUNDRAX7	8970110
SNIAS SA318	8680516	SWRNGNSA226	8780406	THUNDRAX7	8970120
SNIAS SA341	8680610	SWRNGNSA227	8780603	TMPSONNAVION	6150104
SOCATAMS894	8402842	SWRNGNSA227	8780610	TMPSONNAVION	6150112
SOCATARALLYE	8400125	SWRNGNSA227	8780615	TMPSONNAVION	6150114
SOCATARALLYE	8400131	SWRNGNSA227	8780620	TMPSONNAVION	6150116
SPHRTHCIRRUS	38019VC	SWRNGNSA26	*SA26	TMPSONNAVION	6150120
SPHRTHCIRRUS	38019VE	SWRNGNSA26	8780102	TMPSONNAVION	6150122

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
TMPSONNAVION	6150130	VARGA 2150	5940204		
TMPSONNAVION	6150146	VARGA 2150	9350102		
TRYTEK65	0190406	VICKER745	9470204		
TRYTEK65	0190712	VICKER745	9470402		
TRYTEK65	0190714	VICKER745	9470404		
TRYTEK65	0190716	VICKER745	9470602		
TRYTEK65	0190718	WACO AS0	9601202		
TRYTEK65	0190920	WACO GXE	9600702		
TRYTEK65	0190922	WACO R	9600304		
TRYTEK65	0190924	WACO R	9600422		
TRYTEK65	0190928	WACO UPF7	9601302		
TRYTEK65	0190928	WACO UPF7	9601304		
TRYTEK65	0190930	WACO YK	9600816		
TRYTEK65	0190932	WACO YK	9600818		
TRYTEK65	0190934	WACO YK	9600832		
TRYTEKK	0190402	WACO YK	9600834		
TRYTEKK	0190404	WACO YK	9600835		
UNIVACGC1	9230102	WACO YK	9600836		
UNIVACGC1	9230104	WACO YK	9600838		
UNIVACGC1	9230106	WACO YK	9600840		
UNIVACGC1	9230108	WSK M18	9810102		
UNIVACGC1	9230110	WSK M18	9180102		
UNIVACGC1	9230112	WTHRLY201	9630404		
UNIVAR108	9230402	WTHRLY201	9630406		
UNIVAR108	9230404	WTHRLY201	9630408		
UNIVAR108	9230406	WTHRLY201	9630410		
UNIVAR108	9230408				
UNIVAR108	9230412				
UNIVAR108	9230414				
UNIVAR108	9230416				
UNIVAR108	9230418				
UNIVAR415	0420102				
UNIVAR415	0420104				
UNIVAR415	0420202				
UNIVAR415	0420204				
UNIVAR415	0420302				
UNIVAR415	0420304				
UNIVAR415	0420306				
UNIVAR415	0420308				
UNIVAR415	0420310				
UNIVAR415	0420312				
UNIVAR415	0420314				
UNIVAR415	0420316				
UNIVAR415	0420318				
UNIVAR415	0420320				
UNIVAR415	0420322				
UNIVAR415	0420324				
UNIVAR415	0420326				
UNIVAR415	0420328				
UNIVAR415	0420330				
UNIVAR415	0420332				
UNIVAR415	0420334				
UNIVAR415	0420336				
UNIVAR415	0420338				
UNIVAR415	0420340				
UNIVAR415	0420402				
UNIVAR415	0420404				
UNIVAR415	0420406				
UNIVAR415	0420408				
UNIVAR415	0420410				
UNIVAR415	0420502				
UNIVAR415	0420504				
UNIVAR415	0420702				
UNIVAR415	0420722				
UNIVAR415	0540102				
UNIVAR415	0540104				
UNIVAR415	5872014				
UNIVAR415	5872018				
VARGA 2150	5940202				

APPENDIX E

SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL (MM) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MM CODES FOR ENGINES OF SIMILAR DESIGN INTO GROUPS FOR ANALYTICAL PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ALLSN 250C	03002	GE CJ810	30006	OTHER	*R335
ALLSN 250C	03011	GE CJ805	*CJ80	OTHER	*RB21
ALLSN 250C	03013	GE CJ805	30004	OTHER	*SPEY
ALLSN 501D	*501D	GE CT58	*CT58	OTHER	00585
ALLSN 501D	03004	GE CT58	30001	OTHER	01505
ALLSN 501D	03005	GE CT58	30008	OTHER	01510
ALLSN 501D	03006	GLADENK5	37503	OTHER	03003
AMTRMCMCCULH	42501	GLADENR5	37504	OTHER	03010
ARSRCHTFE731	*TFE7	JACOBPR755	35008	OTHER	03012
ARSRCHTFE731	01518	JACOBPR755	35007	OTHER	04501
ARSRCHTPE331	*TPE3	JACOBPR755	35008	OTHER	13802
ARSRCHTPE331	01502	JACOBPR755	35003	OTHER	17013
ARSRCHTPE331	01506	JACOBPR755	35005	OTHER	17030
ARSRCHTPE331	01508	LYC 0540	41532	OTHER	17033
ARSRCHTPE331	01510	LYC LTS101	41560	OTHER	20003
ARSRCHTPE331	01512	LYC 0145	41501	OTHER	26002
CONT 6285	17038	LYC 0145	41502	OTHER	27005
CONT 975	17037	LYC 0145	41503	OTHER	27011
CONT A40	17001	LYC 0235	41505	OTHER	27026
CONT A50	17002	LYC 0290	41506	OTHER	27033
CONT A65	17003	LYC 0320	41500	OTHER	27033
CONT A75	17005	LYC 0320	41508	OTHER	27038
CONT A80	17006	LYC 0320	41509	OTHER	30005
CONT C125	17011	LYC 0340	41510	OTHER	30020
CONT C145	17012	LYC 0360	41511	OTHER	31701
CONT C85	17008	LYC 0360	41513	OTHER	37002
CONT C90	17009	LYC 0360	41514	OTHER	41549
CONT E185	17014	LYC 0360	41515	OTHER	41555
CONT E225	17015	LYC 0360	41522	OTHER	41581
CONT 0200	17020	LYC 0360	41524	OTHER	44554
CONT 0300	17022	LYC 0435	*0435	OTHER	51001
CONT 0300	17024	LYC 0435	41516	OTHER	52001
CONT 0360	17023	LYC 0435	41517	OTHER	52045
CONT 0360	17025	LYC 0435	41518	OTHER	52047
CONT 0360	17033	LYC 0435	41519	OTHER	54501
CONT 0470	*0470	LYC 0435	41520	OTHER	54510
CONT 0470	17026	LYC 0435	41521	OTHER	54517
CONT 0470	17027	LYC 0435	41523	OTHER	54519
CONT 0470	17028	LYC 0435	41525	OTHER	54521
CONT 0470	17029	LYC 0435	41526	OTHER	54523
CONT 0520	*0520	LYC 0480	41527	OTHER	54554
CONT 0520	17032	LYC 0480	41529	OTHER	60002
CONT 0520	17035	LYC 0540	*0540	OTHER	60003
CONT 0520	17040	LYC 0540	41355	OTHER	60004
CONT R670	17016	LYC 0540	41530	OTHER	60005
CONT R670	17018	LYC 0540	41531	OTHER	60006
DHAVXXGIPSY	20004	LYC 0540	41532	OTHER	60007
FCD 8440	26003	LYC 0540	41533	OTHER	60008
FRNKLN4AC150	27002	LYC 0540	41534	OTHER	60009
FRNKLN4AC150	27003	LYC 0540	41535	OTHER	60012
FRNKLN4AC150	27004	LYC 0540	41538	OTHER	60014
FRNKLN4AC176	27006	LYC 0541	41538	OTHER	60014
FRNKLN4AC176	27007	LYC 0541	41539	OTHER	60020
FRNKLN4AC199	27008	LYC 0720	41546	OTHER	60030
FRNKLN4AC199	27009	LYC R680	41540	OTHER	61502
FRNKLN4AC199	27010	LYC R680	41541	OTHER	63501
FRNKLN6A4150	27024	LYC R680	41542	OTHER	64503
FRNKLN6A4165	27025	LYC R680	41543	OTHER	64504
FRNKLN6A4200	27027	LYC R680	41544	OTHER	64505
FRNKLN6A8215	27030	LYC R680	41545	OTHER	67007
FRNKLN6AV335	27020	LYC T53	41552	OTHER	67009
FRNKLN6AV350	27043	MNASCO4	43504	OTHER	67010
FRNKLN6VS335	27040	ONAN B48	99999	OTHER	67011
FRNKLN03356	27033	OTHER	*AVON	OTHER	67012
GF CF700	*CF70	OTHER	*BAST	OTHER	67015
GE CF700	30010	OTHER	*CF6	OTHER	67018
GE CJ810	*CJ81	OTHER	*CJ80	OTHER	67019
GE CJ810	30002	OTHER	*R182	OTHER	67021

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
OTHER	67024	RROYCEDART	54504		
OTHER	67025	RROYCEDART	54505		
OTHER	67026	RROYCEDART	54506		
OTHER	67027	RROYCEDART	54507		
OTHER	67028	RROYCEDART	54508		
OTHER	67029	RROYCEDART	54509		
OTHER	67030	RROYCEDART	54522		
OTHER	67031	RROYCEDART	54553		
OTHER	67032	RROYCEGIPSY	20005		
OTHER	67033	RROYCEGIPSY	20006		
OTHER	67034	RROYCEGIPSY	20007		
OTHER	67037	RROYCEGIPSY	20008		
OTHER	67038	RROYCEVIPER	*VIPE		
OTHER	67050	RROYCEVIPER	10201		
OTHER	60030	RROYCEVIPER	54550		
OTHER	99999	RROYCEVIPER	54552		
OTHER	BE US				
PCKARDV1650	49001				
PWA JT12	*JT12				
PWA JT12	52042				
PWA JT15	52080				
PWA JT15	52112				
PWA JT3C	*JT3C				
PWA JT3C	52036				
PWA JT3D	*JT3D				
PWA JT3D	52039				
PWA JT4	*JT4				
PWA JT4	52037				
PWA JT8	*JT8				
PWA JT8	52044				
PWA JT8	52046				
PWA JT8	52048				
PWA JT8	52049				
PWA JT8	52051				
PWA JT9	*JT9				
PWA JT9	52050				
PWA PT6	*PT6				
PWA PT6	52043				
PWA PT6	52053				
PWA PT6	52403				
PWA PT6	61501				
PWA PT6	61503				
PWA PT6	61504				
PWA PT6	61506				
PWA R1340	*R134				
PWA R1340	52009				
PWA R1340	52010				
PWA R1340	52011				
PWA R1340	52012				
PWA R1340	52016				
PWA R1830	*R183				
PWA R1830	52017				
PWA R1830	52018				
PWA R1830	52019				
PWA R1830	52020				
PWA R2000	*R200				
PWA R2000	52021				
PWA R2000	52023				
PWA R2800	*R280				
PWA R2800	52024				
PWA R2800	52025				
PWA R2800	52026				
PWA R985	*R985				
PWA R985	52006				
PWA R985	52007				
PWA R985	52008				
RROYCEDART	*DART				
RROYCEDART	54503				

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